HEALTH SERVICES AND DEVELOPMENT AGENCY MEETING
DECEMBER 17, 2014
APPLICATION SUMMARY

NAME OF PROJECT:	University of Tennessee Medical Center
PROJECT NUMBER:	CN1409-042
ADDRESS:	1924 Alcoa Parkway Knoxville (Knox County), TN 37920
LEGAL OWNER:	University Health System, Inc. 2121 Medical Center Way, Suite 200 Knoxville (Knox County), TN 37219
OPERATING ENTITY:	NA
CONTACT PERSON:	Jerry Taylor, Esquire (615) 782-2228
DATE FILED:	September 15, 2015
PROJECT COST:	$26,292,001
FINANCING:	Cash Reserves
REASON FOR FILING:	Hospital Construction in Excess of $5 Million, Addition of 44 acute beds

DESCRIPTION:

University of Tennessee Medical Center (UTMC), a 581 licensed bed hospital located in Knoxville (Knox County), Tennessee owned by University Health System, Inc., a Tennessee non-profit public benefit corporation established in 1998, is seeking approval to expand and renovate its neonatal intensive care unit (NICU), to add a new 16 bed intensive care unit (ICU), and to add a new 28 bed medical/surgical unit by renovating and converting existing physician outpatient clinic space. If approved, the project will increase the hospital's licensed bed complement from 581 to 625 beds for a net increase of 44 beds. As noted on the revised Square Footage Chart in the 9/29/14 supplemental response, the project includes approximately 28,694 square feet of renovation and 26,608 square feet of new construction at a total final construction cost of $289.90 per square foot.

The project does not involve the initiation of new health care services or acquisition of major medical equipment. The estimated project cost is $26,292,001. The applicant expects the 28 Med/Surg beds to

open in the 1st quarter of 2016 and the 16 ICU beds to open in the 3rd quarter of 2017 (*source: 9/29/14 supplemental response, item 7*). The entire project is expected to be completed by July 31, 2017.

CRITERIA AND STANDARDS REVIEW

CONSTRUCTION, RENOVATION, EXPANSION, AND REPLACEMENT OF HEALTH CARE INSTITUTIONS

3. **For renovation or expansions of an existing licensed health care institution:**

   a. **The applicant should demonstrate that there is an acceptable existing demand for the proposed project.**

   The nature and scope of the demand for the project is described in detail in the application (pages 10, 11, 26 and 27) and the 9/29/14 supplemental response (pages 7- 10). Changes to the physical plant focus on (1) expansions to the NICU and ICU on the 3rd and 4th floors of the North Pavilion Tower and (2) conversion of existing physician outpatient clinic space to patient rooms for the Med/Surg service on the 6th floor of the South Tower. The project is the final of a 2-phase NICU renovation (phase 1 was completed in 2007) with the end result being the elimination of all remaining open floor room beds.

   Increases in Emergency Department visits based, in large part, on the hospital's status as a Level 1 Trauma Center, and increases in the occupancy of the Med/Surg and ICU services are the principal drivers of demand for the 28 additional Med/Surg and 16 additional ICU beds. ED visits increased by 31.8% from 64,500 in calendar year 2009 to over 85,000 in CY2013. Excluding observation days, Med/Surg inpatient days grew by 10.1% from CY2012-2014 while ICU days grew by approximately 3%. Excluding observation days, average bed occupancy for the 2 services is shown in the table below.

Service	*2012*	*2013*	*2014(est)*	*Year1*	*Year2*
Med/Surg (beds)	*69.4% (327)*	*75.4% (319)*	*73.1% (342)*	*72.4% (402)*	*73.2% (402)*
ICU (beds)	*79.2% (75)*	*78.8% (75)*	*81.6% (75)*	*82% (91)*	*83.1% (91)*

It appears that the application will meet this criterion.

   b. **The applicant should demonstrate that the existing physical plant's condition warrants major renovation or expansion.**

   This is not a renovation project to remedy the existing plant's condition. This key priorities of the project are to accommodate and tie-in existing areas to the proposed new additions and/or to convert the use of the space.

It appears that the application meets this criterion.

SERVICE SPECIFIC CRITERIA AND STANDARD REVIEW

ACUTE CARE BED NEED SERVICES

1. The following methodology should be used and the need for hospital beds should be projected four years into the future from the current year:

   Using the latest utilization and patient origin data from the Joint Annual Report of Hospitals and the most current population projection series from the Department of Health, perform the following:

   Step 1

   Determine the current Average Daily Census (ADC) in each county.

   $$ADC = \frac{\text{Patient Days}}{365 \text{ (366 in leap year)}}$$

   Step 2

   To determine the service area population (SAP) in both the current and projected year:

   a. Begin with a list of all the hospital discharges in the state, separated by county, and showing the discharges both by the county where the patient actually lives (resident discharges), and the county in which the patient received medical treatment.

   b. For the county in which the hospital is (or would be) located (service county), determine which other counties have patients who are treated in your county (resident counties). Treat all of the discharges from another state as if that whole state were a single resident county. The total discharges of residents from another state should be calculated from state population estimates and the latest National Center for Health Statistics southeastern discharge rates.

   c. For each resident county, determine what percent of their total resident discharges are discharged from a hospital in your service county (if less than one percent, disregard).

   d. For each resident county, apply the percentage determined above to the county's population (both projected and current). Add together the resulting numbers for all the

resident counties and add that sum to the projected and current population of your service county. This will give you the service area population (SAP).

Step 3

Determine projected Average Daily Census as:

$$\text{Projected ADC} = \text{Current ADC} \frac{\text{Projected SAP}}{\text{Current SAP}}$$

Step 4

Calculate Projected Bed Need for each county as:

Projected Need = Projected ADC + 2.33 x □Projected ADC

However, if projected occupancy:

$$\text{Projected Occupancy:} \quad \frac{\text{Projected ADC}}{\text{Projected Need}} \times 100$$

is greater than 80 percent, then calculate projected need:

$$\text{Projected Need} = \frac{\text{Projected ADC}}{.8}$$

The Tennessee Department of Health's (TDH) report indicates there is a surplus of 1,250 acute care beds in the applicant's 21 county service area based upon 2012 Final Hospital Joint Annual Report data.

It appears that this criterion has not been met.

2. New hospital beds can be approved in excess of the "need standard for a county" if the following criteria are met:

   a) All existing hospitals in the projected service area have an occupancy level greater than or equal to 80 percent for the most recent Joint Annual Report. Occupancy should be based on the number of licensed beds that are staffed for two consecutive years.

According to the 2012 Joint Annual Reports, only 1 of 32 existing hospitals in the applicant's 21 county service area achieved 80% occupancy. The licensed bed occupancy of the hospitals averaged 46.7% in 2012. (Source: 2012 Joint Annual Report, page 11, 9/29/14 supplemental response).

It appears that this criterion has not been met.

b) All outstanding CON projects for new acute care beds in the proposed service area are licensed.

There are no outstanding Certificate of Need projects for new acute care beds in the applicant's service area. Tennova Healthcare Physicians Regional Medical Center, was approved at the November 19, 2014 Agency meeting for the partial replacement and relocation of its existing facility. The hospital will relocate 272 acute care beds and delicense 91 beds. Please refer to the Certificate of Need information at the end of the staff summary for a more detailed explanation.

Since there are no outstanding and unimplemented projects for new acute care beds in the service area, it appears that this criterion has been met.

c) The Health Facilities Commission may give special consideration to acute care bed proposals for specialty health service units in tertiary care regional referral hospitals.

Special consideration is requested for the following reasons:

- *UT Medical Center is a tertiary care, regional referral hospital, draws patients from 21 counties and is the only Level 1 Trauma Center resulting in a high number of ED admissions and visits.*
- *The proposed addition to the NICU will complete changes made to convert open patient care bed areas to mostly private rooms with all open areas eliminated by project completion.*

It appears that this criterion has been met.

SUMMARY

The following information is a summary of the original application and all supplemental responses. Any staff comments or notes, if applicable, will be in bold italics.

The project includes the expansion of UTMC's adult intensive care unit (ICU) care, medical/surgical and neonatal intensive care (NICU) units through a combination of new construction and renovation. As part of the project, the applicant is seeking approval for the addition of 28 Med/Surg and 16 ICU licensed beds. If approved, the applicant's total licensed bed complement will increase from 581 to 625 acute care beds.

An overview of the project is provided in the executive summary on pages 6 - 9 of the original application with highlights below.

Construction

The major construction aspects of the project include continuation of the hospital's NICU expansion project as "Phase 2" focusing on conversion of all of the NICU beds from open floor model patient bed areas (no dividing walls between the beds) to beds in all private or semi-private patient rooms.

Note: Phase 1 was completed in 2007. The applicant states that Phase 1 construction did not require a certificate of need based on total cost less than $5 million and no change in the hospital's bed complement. In Phase 2, a new addition to the 67-bed NICU will extend out to the side of the existing building on the 3rd floor of the North Pavilion that will extend out over the roof of the 2nd floor. The ICU addition will then be constructed on top of the NICU addition.

A detailed summary of the project by Charles Griffin, President, BarberMcMurry Architects, LLC was provided in the 9/29/14 supplemental response (Item 8). The following chart summarizes the key construction aspects of the project.

Proposed Changes by Floor

Service	Floor	Description of proposed Changes (# licensed beds before/after)	Use of Space Currently	Future Location of Displaced Activities (as applicable)	Total Square Feet of New Construction or renovation Proposed
NICU	3 North Pavilion	Addition; larger space; walled rooms (67/67)	NA – adding new space	NA – adding new space	25,190/SF (new & renovated)
ICU	4 North Pavilion	New ICU addition (80/96)	NA – adding new space	NA – adding new space	18,112/SF (new & renovated)
Med/Surg	6 South Tower	Convert physician clinic space to inpatient wing (422/450)	Physician Clinics	Medical Office Building	12,000/SF (renovation)

Bed Changes by floor that are part of the construction are as follows:

- 3rd Floor, North Pavilion – Combination of new construction and renovation to complete NICU expansion project. No new NICU beds are being requested.
- 4th – Floor, North Pavilion - Primarily new construction (93% of 18,112 total SF) for addition of 16 of the 44 new additional beds being requested by the applicant.
- 6th Floor, South Tower- renovate 12,000/SF of physician outpatient clinic area for conversion to use as all private room Med/Surg inpatient care area. This area will house 28 of the 44 new licensed beds being requested by the applicant.

The following charts reflect the proposed changes in bed assignments and patient rooms.

Licensed Bed Complement Before and After Project Completion

Bed Type	Current Bed Assignment	Proposed Bed Assignment	+/-
Med/Surg	422	450	+28
Obstetrical/Gyn	12	12	0
Adult Critical Care	80	96	+16
Neonatal Intensive Care	67	67	0
Total	**581**	**625**	**+44**

Source: 11/29/14 supplemental response, CN1409-042

Proposed Bed Complement by Patient Room Type

Clinical Area	Current Licensed Beds Private	Current Licensed Beds Semi-Private	Total
Medical - Surgical	422		422*
Obstetrical	12		12
ICCU/CCU	80		80
Neonatal	23	44*	67
Total	537	44	581
Clinical Area	**Proposed Licensed Beds Private**	**Proposed Licensed Beds Semi-Private**	**Total**
Medical-Surgical	450		450
Obstetrical	12		12
ICCU/CCU	96		96
Neonatal	49	18**	67
Total	607	18	625

** 18 of the beds are in 9 "twin rooms" intended for use by twins while 26 are in an open floor unit.*
*** The 18 neonatal twin rooms will be retained.*

- The tables above reflect a net increase of 44 beds, including 28 Med/Surg and 16 ICU beds.
- Currently, 92.4% of UTMC's beds 581 existing beds are in private rooms. This will increase to 97% of 625 total beds at project completion.
- Semi-private rooms will decrease from 7.6% to approximately 3% of the hospital's total licensed bed complement.

Applicant's Project History

- April 2008 - The applicant received Agency approval for a construction/renovation project for a six story wing (CN0801-004A). Two of the floors were shelled-in for future 32 inpatient bed units. The other major components of the project were a new 8-lab endoscopy suite, a net increase of 3 labs, and a new combined 24 bed cardiovascular intensive care unit (CVICU), a net increase of 6 CVICU beds at a total project cost of $26,292,001. The total licensed bed complement of 581 did not change.
- March 2010 - The applicant received approval for the interior build out of approximately 47,428 SF of shelled-in space (CN0912-056A), being floors 3 and 4 of the hospital wing authorized under CN0801-004A. The built-out space will house patient rooms for cardiology and cardiothoracic patients. This project did not change UTMC's licensed bed complement of 581 beds. The estimated cost of the project was $13,941,818.00. The CON was originally scheduled to expire on May 1, 2013. The project was modified on March 27, 2013 with the expiration date extended 24 months to May 1, 2015. The reason given for the extension requests was the time was not right to initiate the build out of the 4th floor. The 3rd floor was built out and opened for public use in March 2011.

- August 2010 - The applicant received approval for the construction of an addition to the existing surgery facilities consisting of approximately 28,000 SF of space to house 13 new operating rooms (CN1005-022A). The project also included the renovation of existing space in the surgical facilities and the addition of a new endovascular suite. The estimated project cost was $18,432,272.00. The CON was originally scheduled to expire on October 1, 2013. The project was modified on August 28, 2013 with the expiration date extended 18 months to April 1, 2015. The reason given for the extension request was the application of "lean principles" to the design of the area resulting in several months to analyze the processes in the area and then several months to redesign the space.
- A brief description of these construction projects and other projects involving the acquisition of medical equipment is provided on pages 27 and 28 of the application.

Ownership

- UT Medical Center is wholly owned by University Health System, Inc. (UHS)
- UHS is a not for profit public benefit corporation established in 1998 for the purpose of acquiring and operating the hospital.
- A copy of the Charter of UHS was provided in the attachments that identifies the major mission and purpose of the corporation and identifies the composition and responsibilities of the parent company's Board of Directors.

Facility Information

- UT Medical Center is a regional tertiary care referral facility for a 21 county service area of East Tennessee
- The hospital is the only Level 1 Trauma Center in the service area.
- According to the TDH website, UTMC is currently licensed for 581 beds.
- Review of the 2013 Joint Annual Report revealed that the hospital reported 581 licensed beds, 546 staffed beds and 141,439 total inpatient days. Based on this information, UTMC had a licensed bed occupancy of 66.7% and a staffed bed occupancy of 70% in 2013.

The following provides the Department of Health's definition of the two bed categories pertaining to occupancy information provided in the Joint Annual Reports:

- ***Licensed Beds - The maximum number of beds authorized by the appropriate state licensing (certifying) agency or regulated by a federal agency. This figure is broken down into adult and pediatric beds and licensed bassinets (neonatal intensive or intermediate care bassinets).***
- ***Staffed Beds - The total number of adult and pediatric beds set up, staffed and in use at the end of the reporting period. This number should be less than or equal to the number of licensed beds.***

Project Need

The applicant provides several reasons for the need of the project:

Neonatal Intensive Care Unit (NICU)

- Renovate 15,432 square feet and expand 9,758 square feet so that 26 beds can be converted from a multi-bassinet open floor unit to separately walled mostly single rooms. 23 beds were previously converted in a project that was completed in February 2007and did not require a CON because the capital expenditure was less than $5 million. The remaining 18 beds are in 9 neonatal "twin rooms".
- The additional space is needed in order for the entire NICU to comply with new code requirements and to provide infants and families with adequate and comfortable space.
- No new NICU beds are being proposed.
- The applicant provides more details on page 10 of the original application.

Addition of Medical/Surgical Beds (28)

- The current medical-surgical inpatient bed occupancy is averaging 89.1% and exceeded 85% every month. (Occupancy rate includes inpatient and observation days).
- In 2013, the 11 adult medical/surgical units averaged 95% occupancy or greater 165 days during the year and 90% or greater 232 days during the year.
- The current number of medical/surgical beds is not adequate to provide care for all patients who are referred for acute care. The number of referrals not accepted as of July 2014 YTD is 394. If this trend continues the annual number could be over 650 patients.
- Emergency room visits have increased from 64,500 in 2009 to over 85,000 in 2013. The lack of available beds increases average emergency department hold times (the time a patient waits for an inpatient bed to become available).
- There is a need for additional teaching beds.
- The applicant provides more details on pages 7, 19-20 of the original application and the first supplemental response.

Addition of Critical Care/Intensive Care Unit (ICU) Beds (16)

- In 2013, the adult critical care units' occupancy rate averaged 78.3% and exceeded 70% every month except for one.
- In 2013, all critical care units at UTMC averaged 95% occupancy or greater 78 days during the year and 90% or greater 115 days during the year. These occupancies are unacceptable for critical care units which are typically smaller nursing units due to higher patient acuity.
- UTMC has been unable to provide care to all the patients in the region needing specialized intensive care services. In 2013 UTMC declined to accept 144 patients requiring adult intensive care treatment. In 2014, January to August the number increased to 229. Annualized that number could reach 344 for the year.
- For the 243 days elapsed from January through August 2014, the hospital has been on critical care hold 114 days.
- There is a need for additional teaching beds
- The applicant provides more details on page R-8, 20, R-21 of the original application and the first supplemental response

Service Area Demographics

The applicant's declared primary service area (PSA) includes the following Tennessee counties: Anderson, Blount, Campbell, Claiborne, Cocke, Cumberland, Fentress, Grainger, Hamblen, Hancock, Hawkins, Jefferson, Knox, Loudon, McMinn, Monroe, Morgan, Roane, Scott, Sevier and Union Counties.

- Per the applicant, residents of the 21-County Tennessee service area accounted for approximately 25,108 or 92.5% of 27,143 total discharges in 2013 (*note: review of the 2013 JAR revealed that residents of the PSA accounted for approximately 93.7% of total discharges in 2013*).
- The total population of the service area is estimated at 1,412,927 residents in calendar year (CY) 2014 increasing by approximately 3.8% to 1,467,132 residents in CY 2018.
- The overall Tennessee statewide population is projected to grow by 3.7% from 2014 to 2018.
- Every county in the service area has a higher percentage of residents age 65 and older than the current and projected age 65 and older statewide average (12.4% of the total population in 2014 increasing to 16.1% in 2018).
- The latest 2014 percentage of the proposed primary service area population enrolled in the TennCare program averaged approximately 22% of the total service area population compared to the statewide enrollment proportion of 18.8%. Fourteen (14) of the 21 counties have a larger proportion of TennCare enrollees compared to the state as a whole.

Service Area Historical Utilization

In the process of preparing the staff summary, HSDA staff noticed some discrepancies between the service area utilization data reported in the application and supplemental response with data reported in the provider Hospital Joint Annual Reports. For the most part, discrepancies were noted with patient day and occupancy data. The table below reflects HSDA's assessment of historical utilization in the 21-county service area from 2011 to 2013 *(note: a breakout of utilization by each hospital in the PSA is provided in Exhibit 1 at the end of the staff summary).*

Service Area Historical Utilization

Facility	Licensed Beds (as of 11/14)	2011 Patient Days	2012 Patient Days	2013 Patient Days	'10-'13 % Change
21 County PSA	4,441	786,936	760,679	753,916	-4.2%
UTMC	581	137,141	136,604	141,439	+3.1%
UTMC as a % of All Hospitals	13%	17.4%	17.9%	18.7%	+2.0%

Source: HSDA staff review of TDH provider JARs and TDH licensed facility report as of 12/4/14.

The chart above reflects the following:

- Inpatient days in the 21 county service area decreased by approximately 4.2% from 2011 – 2013.
- UTMC inpatient days increased 3.1% from 137,141 in 2011 to 141,439 in 2013.

- As noted in the exhibit at the end of the staff summary, 13 of 30 other hospitals in the 21-county service area experienced favorable increases in patient days from 2011 to 2013.
- According to the TDH licensed facility report on the TDH website, there are 4,441 licensed acute hospital beds in the service area.
- Per the 2013 Final Hospital JAR, there were 4,414 licensed beds in 2013.
- UTMC's licensed beds represented 13% of all licensed beds in the 21 county service area.
- Area wide licensed occupancies averaged 46.8% in 2013.
- UTMC's share of patient days at service area hospitals increased from 17.4% in 2011 to 18.7% in 2013.
- No hospitals attained an occupancy rate of 80% or higher in 2013. The closest facilities at or above a 70% licensed bed occupancy were Select Specialty Hospital North Knoxville (79.5%), Select Specialty Hospital Knoxville (77.3%), and East Tennessee Children's Hospital (73.8%). None of these 3 hospitals are adult general short term acute care hospitals.

Applicant's Historical and Projected Utilization

Historical and projected occupancy pertaining to the project are displayed in the table below:

Service	2011	2012	2013	2014 (est.)	Year 1	Year 2
Med/Surg Beds	312	327	319	342	402	402
Patient Days	89,201	98,740	103,976	116,220	127,564	128,840
Occupancy	78.3%	82.7%	89.3%	93.1%	86.9%	87.8%
ICU Beds	76	75	75	75	91	91
Patient Days	22,680	21,687	21,563	22,346	27,241	27,606
Occupancy	81.8%	79.2%	78.8%	81.6%	82%	83.1%
UTMC Total Beds	581	581	581	581	625	625
Total Patient Days	155,583	156,827	162,214	176,342	190,641	192,548
Total Occupancy	73.4%	74%	76.5%	83.2%	83.6%	84.4%
Total Occupancy (*excluding observation days**)	64.7%	64.4%	66.7%			

Source: CN1409-04, and 9/29/14 supplemental response.

Note to Agency Members: Generally speaking, the Centers for Medicare and Medicaid Services (CMS), describes observation services as hospital outpatient services given to help the doctor decide if the patient needs to be admitted as an inpatient or can be discharged. Observation services may be given in the emergency department or another area of the hospital. When in observation and classified as an outpatient, the patient is financially responsible for the copay(s) under the Ambulatory Payment Classification System (Part B Medicare). Time spent in observation status does not count towards the 3 day qualifying inpatient hospital stay needed for Medicare to cover care in a Skilled Nursing Facility. Medicare and Medicaid permit up to 48 hours of observation status while the majority of other 3rd party

insurance payors and managed care organizations may limit observation to 23 hours (Sources: CMS Bulletin 11435, revised May 2014. Information for Health Care Improvement, Health Services Advisory Group, April 2007).

- The hospital's overall bed occupancy with observation days increased by approximately 12.8% from 2011 to 2013. Without observation days, the occupancy increased at a rate of approximately 2.9% during the period.
- Projected occupancy of the hospital is expected to increase by approximately 9.7% from 2014 through Year 2 of the project.
- The utilization of the Med/Surg service is expected to increase by approximately 23.9% from 103,976 patient days in 2013 to 128,840 patient days in Year 2 of the project.
- The utilization of the ICU service is expected to increase by approximately 28% from 21,563 patient days in 2013 to 27,606 patient days in Year 2.

Project Cost

The total estimated project cost is $26,292,001.00. Major costs are:

- Construction Costs plus contingencies - $18,436,230 or 70.1% of total cost
- Moveable equipment - $4,359,965 or 16.6% of the total cost
- Average total construction cost is expected to be $289.89 per square foot. The third quartile for cost per square foot of previously approved hospital projects from 2011-2013 was $274.63 (*total combined renovation plus new construction cost*). The applicant states that the reasons for the higher cost include inflation (e.g., from completion of Phase 1 of the NICU expansion Project in 2007) and engineering changes in additions above or adjacent to the existing physical plant.
- For other details on Project Cost, see the Project Cost Chart on page 33 of the original application.

Historical Data Chart

- According to the Historical Data Chart, UT Medical Center reported favorable net operating income (NOI) for 2 of 3 of the most recent fiscal year periods: $8,502,449 for 2012 and $3,865,824 for 2013.
- As a percent of net operating revenue, NOI was 1.5% in 2012 and 0.7%, in 2013.

Projected Data Chart

The applicant provided a Projected Data Chart for the proposed new Med/Surg ICU (28 Med/Surg and 16 ICU). Key highlights of the hospital's projected financial performance are as follows:

<u>New Med/Surg Beds</u>

- The occupancy of the 28 proposed new beds is expected to reach approximately 91.8% on 9,382 patient days in Year 2, inclusive of approximately 1,840 observation patient days. There is a 2% projected increase in patient census from Year 1.
- Net operating income less capital expenditures will equal $470,514 or approximately 2.8% of net operating revenue in Year 1.

New ICU Beds

- The occupancy of the 16 proposed new beds is expected to reach approximately 81.6% in Year 2. There is a 2% increase in patient census from Year1.
- Net operating income less capital expenditures will equal $236,302 or approximately 2.2% of net operating revenue in Year 1.

The salary and benefit expenses of additional clinical staff that will be hired for the new Med/Surg and ICU units amounts to approximately 65% of the total costs for these items in line D.1 of the Projected Data Chart. Allocations were also included for additional ancillary clinical staff (pharmacy, imaging, physical therapy, etc.) and non-clinical support staff such as dietary and maintenance staff (please see Item 12 of the 9/29/14 supplemental response).

Charges

In Year 1 of the proposed project, the average charge per patient per day is as follows:

New Med/Surg Beds

Average Gross Charge

- $6,919.95

Average Deduction from Operating Revenue

- $5,104.85

Average Net Charge

- $1,815.10

New ICU Beds

Average Gross Charge

- $8,733.10

Average Deduction from Operating Revenue

- $6,487.07

Average Net Charge

- $2,246.03

The applicant states that the projected charges above are the same as UTMC's current charges for the services noted above. Representative samples of the UTMC's fee schedule by primary diagnosis related group codes are provided in the application following page R-41.

Payor Mix

- The applicant indicates it has contracts with all three TennCare MCOs available to its service area population: United HealthCare Community Plan (formerly AmeriChoice), TennCare Select and Blue Care. Additionally, the applicant will be under contract with AmeriGroup effective January 1, 2015.
- The Medicare and TennCare payor mix for the project is expected to mirror the hospital's overall payor mix for the 12-month period ending July 31, 2014 (46% Medicare and 13%

TennCare). The projected payor mix of the project is discussed in further detail in Item 10 of the 9/29/14 supplemental response.

- Projected Med/Surg Medicare and TennCare net revenues are $7,679,851 and $2,170,393, respectively, in Year 1.
- Projected ICU Medicare and TennCare net revenues are $4,829,130 and $1,364,754, respectively, in Year 1.

Financing

- The source of funding support for the project is cash reserves of UTMC.
- A September 15, 2014 letter from Thomas Fisher, Senior Vice President and CFO of UTMC, is provided in the application that attests to the hospital's ability to financially support the project.
- Review of the UTMC's financial statement as of 12/31/13 revealed cash and cash equivalents of $69,613,690, current assets of $181,131,101 and current liabilities of $130,766,898 for a current ratio of 1.39 to 1.0.

Note to Agency Members: Current ratio is a measure of liquidity and is the ratio of current assets to current liabilities, which measures the ability of an entity to cover its current liabilities with its existing current assets. A ratio of 1:1 would be required to have the minimum amount of assets needed to cover current liabilities.

Staffing

- A staffing plan for the 44 additional beds to be allocated to the new Med/Surg and ICU units was developed based on current staffing patterns of existing UTMC bed units of equivalent bed count.
- The additional staff that will be hired for the new Med/Surg and ICU units is approximately 41.13 and 49.01 full time equivalents (FTE), respectively, for a total of 90.14 FTEs in Year 1 of the project.
- Please refer to the table on page 44 of the original application for an overview of the current and projected staffing of the proposed project.
- The applicant plans to recruit approximately 4.2 FTE new internal medicine physicians in order to maintain UTMC's current standards of high quality care. The table below from the 9/29/14 supplemental response identifies the hospital's physician specialists staff associated with the services participating in the project.

Medical Specialty	#2013 JAR	Current	Year 1
Surgery	138	145	
OB/GYN	41	40	
Internal Medicine	35	39	43.2
Other	302	302	
Total	516	526	

Licensure/Accreditation

UT Medical Center is licensed by the Tennessee Department of Health and accredited by The Joint Commission. Note: The hospital's accreditation was renewed during the period the application was in the 60 day review cycle. UTMC was notified on November 24, 2014 by the Joint Commission of its full accreditation award effective September 13, 2014. The copy of the Joint Commission award notice was submitted to HSDA staff on 11/25/14 and is attached to the application packet.

The applicant has submitted the required corporate documentation, site control documents and listing of key affiliation agreements (e.g. agreements with area colleges or universities) and patient transfer agreements with hospitals in its service area. Staff will have a copy of these documents available for member reference at the meeting. Copies are also available for review at the Health Services and Development Agency office.

Should the Agency vote to approve this project, the CON would expire in three years.

CERTIFICATE OF NEED INFORMATION FOR THE APPLICANT:

There are no other Letters of Intent, denied or pending applications for this applicant.

Outstanding Certificates of Need

University of Tennessee Medical Center, CN1005-022AME, has an outstanding Certificate of Need that will expire on April 1, 2015. The CON was approved at the August 25, 2010 Agency meeting for the construction of an addition to the existing surgery facilities consisting of approximately 28,000 SF of space to house 13 new operating rooms. The project also includes the renovation of existing space in the surgical facilities and the addition of a new endovascular suite. The estimated project cost is **$18,432,272.00.** *Project Status: The project was modified on August 28, 2013 and granted an 18 month extension date from October 1, 2013 to April 1, 2015. The most recent Annual Project Report was submitted to HSDA on July 30, 2014. Per 10/27/14 e-mail from representative for the hospital, UTMC is in the final (4th phase) of this construction project at this time. The project is approximately 85% complete. This final phase involves the new and relocated Sterilizer equipment. The previously planned final phase that included Offices, Locker rooms, Break room and Classroom areas was moved up in order of completion to deal with work flow issues. The current goal is to have the project at 100% completion by year end.*

University of Tennessee Medical Center, CN0912-056AME, has an outstanding Certificate of Need which will expire on May 1, 2015. It was approved at the March 24, 2010 Agency meeting for the interior build out of approximately 47,428 SF of shelled-in space, being floors 3 and 4 of the hospital wing authorized under CN0801-004A. The built-out space will house patient rooms for cardiology and cardiothoracic patients, and is located on the main campus of UTMC at 1924 Alcoa Highway, Knoxville (Knox County), TN. There will be no change from the UTMC's current licensed bed complement of 581 beds. The estimated cost of the project is **$13,941,818.00** *Project Status Report: The project was modified on March 27, 2013 with the expiration date extended to May 1, 2015. The most recent Annual Project Report was submitted to HSDA on July 23, 2014. Per 10/27/14 e-mail from a representative for the hospital, the 3rd floor build out is complete, construction is underway for the 4th floor and is expected to be completed by November 4, 2015.*

CERTIFICATE OF NEED INFORMATION FOR OTHER SERVICE AREA FACILITIES:

There are no other Letters of Intent, denied or pending applications for other health care organizations proposing this type of service.

Outstanding Certificates of Need:

Tennova Healthcare - Physicians Regional Hospital, CN1408-033A, has an outstanding Certificate of Need that will expire on January 1, 2019. The project was approved at the November 19, 2014 Agency meeting for the partial relocation and replacement of Physician Regional Medical Center from 900 E. Oak Hill Avenue, Knoxville (Knox County), TN 37917 to an unaddressed site located consisting of 110 acres located at the intersection of Middlebrook and Old Weisgarber Road, across from Dowell Springs Boulevard, Knoxville, TN. The project includes the construction and equipping of a 556,083 square foot replacement hospital and the relocation of 272 beds and 24 operating / procedures rooms. As a condition of approval, the applicant will delicense 91 beds. The estimated project cost is **$303,545,204.00.** *Project Status Update: the project was recently approved.*

East Tennessee Children's Hospital, CN1401-002A, has an outstanding Certificate of Need that will expire on June 1, 2017. The project was approved at the April 23, 2014 Agency meeting for the renovation and expansion of the NICU, Neonatal Abstinence Syndrome Unit, Perioperative Services and Specialty Clinic located on the hospital's campus at 2018 Clinch Avenue, Knoxville (Knox County), TN 37916. The estimated project cost is **$75,302,000.00.** *Project Status Update: the project was recently approved.*

PLEASE REFER TO THE REPORT BY THE DEPARTMENT OF HEALTH, DIVISION OF HEALTH STATISTICS, FOR A DETAILED ANALYSIS OF THE STATUTORY CRITERIA OF NEED, ECONOMIC FEASIBILITY, AND CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTH CARE IN THE AREA FOR THIS PROJECT. THAT REPORT IS ATTACHED TO THIS SUMMARY IMMEDIATELY FOLLOWING THE COLOR DIVIDER PAGE.

MF/JG
(12/4/2014)

EXHIBIT 1
Joint Annual Report Occupancy Rates with 2014 Licensed Beds

Hospital	County	2011 Licensed Beds	2011 Inpatient Days	2011 Occupancy Rate	2012 Licensed Beds	2012 Inpatient Days	2012 Occupancy Rate	2013 Licensed Beds	2013 Inpatient Days	2013 Occupancy Rate	Inpatient Days Percent Changed	Current Licensed Beds**
Methodist Medical Center Oak Ridge	Anderson	301	51,464	46.8%	301	48,308	44.0%	301	47,245	43.0%	-8.2%	301
Ridgeview Psychiatric Hospital and Center	Anderson	16	2,592	44.4%	16	3,372	57.7%	16	3,573	61.2%	37.8%	16
Blount Memorial Hospital	Blount	304	54,809	49.4%	304	51,691	46.6%	304	52,120	47.0%	-4.9%	304
Peninsula Hospital	Blount	155	24,579	43.4%	155	29,332	51.8%	155	29,646	52.4%	20.6%	0
Jellico Community Hospital	Campbell	54	5,890	29.9%	54	4,724	24.0%	54	4,123	20.9%	-30.0%	54
LaFollette Medical Center	Campbell	66	11,370	47.2%	66	11,429	47.4%	66	13,803	57.3%	21.4%	66
Claiborne County Hospital	Claiborne	85	7,937	25.6%	85	7,178	23.1%	85	5,336	17.2%	-32.8%	85
Newport Medical Center	Cocke	74	5,999	22.2%	74	7,607	28.2%	74	7,740	28.7%	29.0%	74
Cumberland Medical Center	Cumberland	189	25,709	37.3%	189	22,073	32.0%	189	22,557	32.7%	-12.3%	189
Jamestown Regional Medical Center	Fentress	85	7,885	25.4%	85	5,422	17.5%	85	2,897	9.3%	-63.3%	85
Lakeway Regional Hospital	Hamblen	135	15,519	31.5%	135	14,064	28.5%	135	11,358	23.1%	-26.8%	135
Morristown Hamblen Hospital	Hamblen	167	26,725	43.8%	167	25,436	41.7%	167	27,985	45.9%	4.7%	167
Hancock County Hospital	Hancock	10	808	22.1%	10	1,199	32.8%	10	1,127	30.9%	39.5%	10
Hawkins County	Hawkins	50	5,153	28.2%	50	3,530	19.3%	50	3,139	17.2%	-39.1%	50

Memorial Hospital											
Jefferson Memorial Hospital	Jefferson	58	9,061	42.8%	58	8,565	40.5%	58	7,129	33.7%	-21.3%	58
East Tennessee Children's Hospital	Knox	152	35,694	64.3%	152	40,530	73.1%	152	40,939	73.8%	14.7%	152
Fort Sanders Regional Medical Center	Knox	517	88,758	47.0%	517	86,156	45.7%	517	80,484	42.7%	-9.3%	517
North Knoxville Medical Center	Knox	108	12,251	31.1%	108	15,128	38.4%	108	16,323	41.4%	33.2%	0
Parkwest Medical Center	Knox	307	77,646	69.3%	307	75,068	67.0%	307	73,604	65.7%	-5.2%	462
Physicians Regional Medical Center*	Knox	401	82,081	56.1%	401	74,903	51.2%	401	70,885	48.4%	-13.6%	610
Select Specialty Hospital Knoxville	Knox	35	9,709	76.0%	35	10,153	79.5%	35	9,876	77.3%	1.7%	35
Select Specialty Hospital North Knoxville	Knox	33	9,222	76.6%	33	9,127	75.8%	33	9,581	79.5%	3.9%	33
Turkey Creek Medical Center	Knox	101	18,265	49.5%	101	16,853	45.7%	101	17,694	48.0%	-3.1%	0
University of Tennessee Medical Center	Knox	581	137,141	64.7%	581	136,604	64.4%	581	141,439	66.7%	3.1%	581
Fort Loudoun Medical Center	Loudon	50	6,629	36.3%	50	6,195	33.9%	50	6,469	35.4%	-2.4%	50
Starr Regional Medical Center Athens	McMinn	118	8,275	19.2%	118	8,366	19.4%	118	8,708	20.2%	5.2%	190
Starr Regional Medical Center Etowah	McMinn	72	8,892	33.8%	72	7,526	28.6%	72	5,995	22.8%	-32.6%	0
Sweetwater Hospital	Monroe	59	11,465	53.2%	59	10,251	47.6%	59	10,115	47.0%	-11.8%	59

Roane Medical Center	Roane	105	7,452	19.4%	105	6,620	17.3%	52	8,641	45.5%	16.0%	54
Pioneer Community Hospital of Scott	Scott	25	5,287	57.9%	0	0	0.0%	0	0	0.0%	-100.0%	25
LeConte Medical Center	Sevier	79	12,669	43.9%	79	13,269	46.0%	79	13,385	46.4%	5.7%	79
Total Service Area		**4492**	**786,936**	**48.0%**	**4467**	**760,679**	**46.7%**	**4414**	**753,916**	**46.8%**	**-4.2%**	**4441**

* Physicians Regional Medical Center reported in 2012 Joint Annual Report that they had 111 licensed beds when the the reported number should have been 401.

** Licensed beds in the satellite hospitals listed below are reported under their parent hospital with Department of Health/Licensure.

Peninsula Hospital beds are reported with Parkwest Medical Center;

Turkey Creek Medical Center and North Knoxville Medical Center beds are reported with Physicians Regional Medical Center;

Starr Regional Medical Center Etowah beds are reported with Starr Regional Medical Center.

Ridgeview Psychiatric Hospital and Center's 16 licensed beds are licensed under TN Department of Mental Health and Substance Abuse

Source: Final Hospital Joint Annual Reports for 2011, 2012, and 2013 and the Department of Health/Licensure

Letter of Intent

LETTER OF INTENT
TENNESSEE HEALTH SERVICES AND DEVELOPMENT AGENCY

The Publication of Intent is to be published in the Knoxville News Sentinel, which is a newspaper of general circulation in Knox County, Tennessee, on or before September 10, 2014 for one day.

This is to provide official notice to the Health Services and Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 *et seq.*, and the Rules of the Health Services and Development Agency, that The University of Tennessee Medical Center (UTMC), owned and managed by University Health System, Inc., a Tennessee not-for-profit corporation, intends to file an application for a Certificate of Need for: (1) the expansion and renovation of its Neonatal Intensive Care Unit (NICU) consisting of approximately 9,758 square feet of new construction and 15,432 square feet of renovated space; (2) the addition of approximately 16,850 square feet of new space and renovation of approximately 1,262 square feet of existing space, which will house a new addition to the Intensive Care Unit (ICU); (3) the renovation of approximately 12,000 square feet of existing space to convert it from non-inpatient care space to inpatient rooms; and (4) the addition of 44 acute care beds to its license. Of the 44 requested beds, 28 are anticipated to be allocated as general medical surgical beds, and 16 as ICU beds. UTMC is located at 1924 Alcoa Highway, Knoxville, Knox County, Tennessee, and is licensed as a general acute care hospital by the Tennessee Board for Licensing Health Care Facilities. No changes in services or major medical equipment are involved in this project. The estimated project cost is not to exceed $27,000,000.00.

The anticipated date of filing the application is September 15, 2014.

The contact person for this project is Jerry W. Taylor, Attorney, who may be reached at: Stites & Harbison, PLLC, SunTrust Plaza Suite 800, 401 Commerce Street, Nashville, Tennessee, 37219, 615-782-2228, jerry.taylor@stites.com.

Signature

9-10-14
Date

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The published Letter of Intent contains the following statement pursuant to T.C.A. § 68-11-1607(c)(1). (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

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ORIGINAL APPLICATION

CERTIFICATE OF NEED APPLICATION

FOR

UNIVERSITY OF TENNESSEE MEDICAL CENTER

Hospital Expansion and Renovation, and the Addition of 44 Acute Care Beds

Knox County, Tennessee

September 15, 2014

Contact Person:

Jerry W. Taylor, Esq.
Stites & Harbison, PLLC
401 Commerce Street, Suite 800
Nashville, Tennessee 37219
615-782-2228

Square Footage SECTION A:

APPLICANT PROFILE

1. ***Name of Facility, Agency, or Institution***

University of Tennessee Medical Center **Name**		
1924 Alcoa Highway **Street or Route**		Knox **County**
Knoxville **City**	TN **State**	37920 **Zip Code**

2. ***Contact Person Available for Responses to Questions***

Jerry W. Taylor **Name**		Attorney **Title**
Stites & Harbison, PLLC **Company Name**		jerry.taylor@stites.com **Email address**
401 Commerce Street, Suite 800 **Street or Route**	Nashville TN **City** **State**	37219 **Zip Code**
Attorney **Association with Owner**	615-782-2228 **Phone Number**	615-742-0302 **Fax Number**

3. ***Owner of the Facility, Agency or Institution***

University Health System, Inc. **Name**		865-305-6600 **Phone Number**
2121 Medical Center Way, Suite 200 **Street or Route**		Knox **County**
Knoxville **City**	TN **State**	37920 **Zip Code**

4. ***Type of Ownership of Control (Check One)***

A.	Sole Proprietorship	F.	Government (State of TN or
B.	Partnership	G.	Political Subdivision)
C.	Limited Partnership	H.	Joint Venture
D.	Corporation (For Profit)	I.	Limited Liability Company
E.	Corporation (Not-for-Profit) **X**		Other (Specify)_____

PUT ALL ATTACHMENTS AT THE BACK OF THE APPLICATION IN ORDER AND REFERENCE THE APPLICABLE ITEM NUMBER ON ALL ATTACHMENTS.

Legal entity documentation is attached as Attachment A, 4.

5. *Name of Management/Operating Entity (If Applicable)*

N/A.

Name

Street or Route **County**

City **State** **Zip Code**

PUT ALL ATTACHMENTS AT THE END OF THE APPLICATION IN ORDER AND REFERENCE THE APPLICABLE ITEM NUMBER ON ALL ATTACHMENTS.

6. *Legal Interest in the Site of the Institution (Check One)*

A. Ownership
B. Option to Purchase
C. Lease of 50 Years **X**
D. Option to Lease
E. Other (Specify) _____

PUT ALL ATTACHMENTS AT THE BACK OF THE APPLICATION IN ORDER AND REFERENCE THE APPLICABLE ITEM NUMBER ON ALL ATTACHMENTS.

A copy of the Lease and Transfer Agreement is attached as Attachment A, 6.

7. *Type of Institution (Check as appropriate--more than one response may apply)*

A. Hospital (Specify) General **X**
B. Ambulatory Surgical Treatment Center (ASTC), Multi-Specialty
C. ASTC, Single Specialty
D. Home Health Agency
E. Hospice
F. Mental Health Hospital
G. Mental Health Residential Treatment Facility
H. Mental Retardation Institutional Habilitation Facility (ICF/MR)
I. Nursing Home
J. Outpatient Diagnostic Center
K. Recuperation Center
L. Rehabilitation Facility
M. Residential Hospice
N. Non-Residential Methadone Facility
O. Birthing Center
P. Other Outpatient Facility (Specify)_____
Q. Other (Specify) _____

8. Purpose of Review ***(Check) as appropriate--more than one response may apply)***

A.	New Institution		
B.	Replacement/Existing Facility		
C.	Modification/Existing Facility	X	
D.	Initiation of Health Care Service as defined in TCA § 68-11-1607(4) (Specify)_____		
E.	Discontinuance of OB Services		
F.	Acquisition of Equipment		
G.	Change in Bed Complement [*Please note the type of change by underlining the appropriate response: Increase, Decrease, Designation, Distribution, Conversion, Relocation]*		X
H.	Change of Location		
I.	Other (Specify)_____ _____		

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

9. **Bed Complement Data**

Please indicate current and proposed distribution and certification of facility beds.

N/A

		Current Beds Licensed	*CON*	*Staffed Beds*	*Beds Proposed*	*TOTAL Beds at Completion*
A.	Medical (Med/surg beds combined on Line B)					
B.	Surgical	422		390*	28	450
C.	Long-Term Care Hospital					
D.	Obstetrical	12		12		12
E.	ICU/CCU	80		80	16	96
F.	Neonatal	67		67		67
G.	Pediatric					
H.	Adult Psychiatric					
I.	Geriatric Psychiatric					
J.	Child/Adolescent Psychiatric					
K.	Rehabilitation					
L.	Nursing Facility (non-Medicaid Certified)					
M.	Nursing Facility Level 1 (Medicaid only)					
N.	Nursing Facility Level 2 (Medicare only)					
O.	Nursing Facility Level 2 (dually certified Medicaid/Medicare)					
P.	ICF/MR					
Q.	Adult Chemical Dependency					
R.	Child and Adolescent Chemical Dependency					
S.	Swing Beds					
T.	Mental Health Residential Treatment					
U.	Residential Hospice					
	TOTAL	**581**		**549**	**44**	**625**

*CON-Beds approved but not yet in service

* The 32 unstaffed beds are allocated to occupy the 4th floor of the Heart Hospital, the build out of which was approved by CN0912-056AE. These beds will be opened in November of 2014. All beds for which there is physical space in the hospital are staffed. Upon the opening of the 4th floor of the Heart Hospital, these beds will be staffed as well.

10. **Medicare Provider Number:** 44-0015
Certification Type: Hospital

11. **Medicaid Provider Number:** 0044-0015
Certification Type: Hospital

12. **If this is a new facility, will certification be sought for Medicare and/or Medicaid?**

N/A. UTMC is certified for both Medicare and TennCare

13. **Identify all TennCare Managed Care Organizations/Behavioral Health Organizations (MCOs/BHOs) operating in the proposed service area.**

BlueCare

UnitedHealth Community Plan

TennCare Select

Will this project involve the treatment of TennCare participants?

Yes

If the response to this item is yes, please identify all MCOs/BHOs with which the applicant has contracted or plans to contract.

UTMC contracts with all three TennCare MCO listed above. In addition, effective January 1, 2015 UTMC will be under contract with AmeriGroup Community Care.

Discuss any out-of-network relationships in place with MCOs/BHOs in the area.

Kentucky Medicaid and Kentucky Medicaid MCOs – Average of 31 inpatients per month.

Cigna – HealthSpring Medicare Advantage – Average of 12 inpatients per month.

NOTE: ***Section B*** **is intended to give the applicant an opportunity to describe the project and to discuss the need that the applicant sees for the project.** ***Section C*** **addresses how the project relates to the Certificate of Need criteria of Need, Economic Feasibility, and the Contribution to the Orderly Development of Health Care. Discussions on how the application relates to the criteria should not take place in this section unless otherwise specified.**

SECTION B: PROJECT DESCRIPTION

Please answer all questions on 8 1/2" x 11" white paper, clearly typed and spaced, identified correctly and in the correct sequence. In answering, please type the question and the response. All exhibits and tables must be attached to the end of the application in correct sequence identifying the questions(s) to which they refer. If a particular question does not apply to your project, indicate "Not Applicable (NA)" after that question.

I. **Provide a brief executive summary of the project not to exceed two pages. Topics to be included in the executive summary are a brief description of proposed services and equipment, ownership structure, service area, need, existing resources, project cost, funding, financial feasibility and staffing.**

Project Description

The University of Tennessee Medical Center (UTMC) seeks CON authorization for: (1) the expansion and renovation of its Neonatal Intensive Care Unit (NICU) consisting of approximately 9,758 square feet of new construction and 15,432 square feet of renovated space; (2) the addition of approximately 16,850 square feet of new space and renovation of approximately 1,262 square feet of existing space, which will house a new Intensive Care Unit (ICU); (3) the renovation of approximately 12,000 square feet of existing space to convert it from non-inpatient care space to inpatient rooms; and (4) the addition of 44 acute care beds to its license. Of the 44 requested beds, 28 are anticipated to be allocated as general medical surgical beds, and 16 as ICU beds.

Services & Equipment

This project will result in no changes to the services provided by UTMC. It will improve and expand the facility, and provide needed additional bed capacity. There is no major medical equipment involved in this project, but movable medical equipment will be acquired.

Ownership Structure

UTMC is owned by University Health System, Inc. (UHS), a not-for-profit public benefit corporation that was established in 1998 for the purpose of acquiring and operating UTMC. On July 8, 1999, UHS entered into a Lease and Transfer Agreement ("Agreement") between it and the State of Tennessee and the University of Tennessee, which consummated the transfer of UTMC to UHS. Under the Agreement, UHS leases all existing Real Property and Improvements from the State and UT, and is solely responsible for constructing any new buildings or improvements, which it will then own until the expiration of the Agreement in 2049. Accordingly, the project costs for this project are calculated based on actual costs of construction and acquisition rather than on the imputed value of the lease.

Service Area

The primary service area consists of the following 21 counties: Anderson, Blount, Campbell, Claiborne, Cocke, Cumberland, Fentress, Grainger, Hamblen, Hancock, Hawkins, Jefferson, Knox, Loudon, McMinn, Monroe, Morgan, Roane, Scott, Sevier, and Union. Residents of these counties accounted for 25,108, or 92.5%, of the 27,143 total discharges from UTMC in 2013.

Need

UTMC is requesting an additional 44 acute care beds. Of these, 28 will be allocated to general medical surgical use and 16 will be allocated to critical care (ICU) use. These beds are needed to managed extremely high inpatient utilization and occupancy in both categories of beds.

Medical surgical Beds: The University of Tennessee Medical Center, the region's only academic medical center, serves as the regional referral center and sole Level I trauma center for a 21 county service area. The following facts clearly evidence the need for additional medical surgical beds.

In 2013 the adult medical surgical occupancy rate averaged 89.1%, and exceeded 85% every month. There is very little fluctuation in the occupancy – the beds are consistently highly utilized. In 2013 the 11 adult med-surg units at UTMC averaged 95% or greater occupancy 165 days during the year, and 90% or greater occupancy 232 days during the year. In 2013 the adult med-surg units experienced a daily occupancy of 95% or greater occupancy 81 days during the year, and 80% or greater occupancy 325 days during the year.

The current number of medical-surgical beds is not adequate to provide care for all patients who are referred for acute care. The number of referrals not accepted YTD July 2014 is 384. Of those, 229 were critical care patients, leaving 155 patients who needed an general medical surgical bed. If this trend continues there will be over 650 patients in 2014 who need the services of UTMC, but could not be served due to unavailability of beds.

Additionally, Emergency Room visits have increased from 64,500 in 2009 to over 85,000 in 2013. Over 40% of all patients who are treated in the emergency room require use of an acute care bed during the patient's stay. The lack of available beds leads to internal queuing and inefficiencies. In 2014, the average E.D. hold time (the time E.D. patients needing an inpatient bed are required to wait for a bed to become available) has been 235 hours per day. This is drastic increase from 2013, and reflects the serious bed shortage UTMC is facing.

Critical Care Beds: In addition to being the region's only academic medical center and only Level I trauma center for a 21 county service area, it is one of five Joint Commission accredited Comprehensive Stroke Centers in the state and is the only fully trained Adam Williams Initiative hospital in Tennessee. (The Adams Williams Initiative is explained elsewhere in this application). These distinctions mark UTMC as having the infrastructure, staff, equipment and training necessary to provide the highest level of care to the most complex and critically ill patients in the region.

The need for additional critical care beds at UTMC is evidenced in part by the historical utilization and occupancy of the existing critical care beds:

In 2013 the adult critical care units occupancy rate averaged 78.3%, and exceeded 70% every month except for one. There is very little fluctuation in the occupancy – the beds are consistently highly utilized. And it is important to note that critical care beds, because they are distributed among smaller nursing units due to higher patient acuity, cannot be run at the 80% target threshold for all hospital bed types. In 2013 all adult critical care units at UTMC averaged 95% or greater occupancy on 78 days during the year, and 90% or greater occupancy on 115 days during the year. In 2013 the daily occupancy on all adult critical care units at UTMC exceeded 80% 183 days during the year, exceeded 85% on 104 days, exceeded 90% on 41 days, and exceeded 95% on 9 days. These occupancies are clearly unacceptable for critical care beds.

Over the last several years UTMC has been unable to provide care to all the patients in the region who needed the specialized intensive care services offered at UTMC. Each year the hospital is forced to turn away patients referred to it from other hospitals in the region due to a lack of capacity. In 2013, UTMC declined to accept for transfer 144 patients requiring adult intensive care treatment. In 2014, that number increased to 229 patients from January - August. If this continues that number could reach 344 by the end of the year.

Of the patients refused transfer to UTMC, 16.2% of the patients this year were patients suffering a neurological injury/illness, 40.6% suffered from an acute medical illness that exceeded the ability of the transferring hospital, necessitating transfer to a facility with more resources in terms of equipment, training and specialized care providers. As of August 31, 2014, UTMC has a Medicare case mix index of 2.00. Case mix index is a relative measure of patient acuity. The national average Medical case mix index is 1.52 based on 2013 data. Having such a high CMI value reflects the clinical complexity and resources needed for the patients cared for by UTMC and further demonstrates the ability of UTMC to provide the highest level of care possible to the most critically ill and injured patients.

Due to capacity constraints and a record volume of requests for transfers to UTMC ICUs from the region, the hospital has been on critical (intensive) care hold 114 of the 243 days elapsed January through August in 2014. The result is an increase in the average number of days being on critical (intensive) care unit hold of 9 per month in 2013 to 14 per month in 2014. Thus in 2014 ICU patients were declined for transfer to UTMC's ICU roughly 47% of the time.

By increasing adult intensive care bed capacity UTMC will be better able to serve the needs of the residents and visitors in the region.

Existing Resources

UTMC is the region's only academic medical center, and only Level I Trauma Center. While there are many high quality hospitals in the service area, UTMC is unique among these in that it offers all of the following special services in addition to it being a teaching hospital and Level I Trauma Center: Renal Transplant Center; Regional Perinatal Center (Level II and III NICU); Pediatric Heart Program; Hemophilia Center; Adult Cystic Fibrosis Center; LIFESTAR Aeromedical Program. In that sense, there are no comparable existing resources in the service

area.

According to data received from the Department of Health, the average occupancy rates for hospitals in the service area are 46.7% on licensed beds, and 53.6% on staffed beds.

This does not obviate the need for the requested beds at UTMC. The immediately preceding response, as well as more detailed discussions elsewhere in this application, explains UTMC's need for the beds, regardless of any surplus of beds in the service area as a whole.

Additionally, the unique and specialized services provided by UTMC, as well as patient choice and physician preference, all strongly support the need for additional bed capacity at UTMC, and dictate against a strategy of continuing to turn away would-be admissions with the patients presumably finding a bed at another area hospital.

Project Cost & Funding

The total estimated project cost is $26,292,001. The largest single item is the construction cost of $16,031,504, and a related contingency of $2,404,726. The reasonableness of this cost is verified by the project architect in Attachment C, II, Economic Feasibility, 1.

The next largest cost is movable equipment at a cost of $4,359,965. No major medical equipment is involved. The only single piece of equipment over $50,000 is an Omnicell, which is a state of the art medication dispensing unit, and will be tied into patients' Electronic Health Records. One of these will be purchased for each of the units. All equipment purchase amounts were negotiated at arms-length among experienced healthcare purchasers and vendors and are reasonable.

The project will be funded through the cash reserves of the owner, University Health System, Inc.

Financial Feasibility

The project is financially feasible. The Financial Statements of UHS reflect sufficient cash reserves to fund the project. As reflected on the Projected Data Chart, both the med/surg and the ICU bed additions will have a positive net operating income in each of the first two years of operation. The margins decrease in the second year, resulting from assumed declining reimbursement rates from government payors. In any event, the Financial Statements reflect sufficient assets to ensure financial viability.

Staffing

UTMC proposes to staff the additional beds with the same general staffing pattern as it currently utilizes on comparable units of comparable size. For the 28 bed med/surg unit, that will require a total of 41.13 clinical positons. For the 16 bed critical care unit, it will require 49.01 clinical positions.

II. Provide a detailed narrative of the project by addressing the following items as they relate to the proposal.

A. **Describe the construction, modification and/or renovation of the facility (exclusive of major medical equipment covered by T.C.A. § 68-11-1601 et seq.) including square footage, major operational areas, room configuration, etc. Applicants with hospital projects (construction cost in excess of $5 million) and other facility projects (construction cost in excess of $2 million) should complete the Square Footage and Cost per Square Footage Chart. Utilizing the attached Chart, applicants with hospital projects should complete Parts A.-E. by identifying as applicable nursing units, ancillary areas, and support areas affected by this project. Provide the location of the unit/service within the existing facility along with current square footage, where, if any, the unit/service will relocate temporarily during construction and renovation, and then the location of the unit/service with proposed square footage. The total cost per square foot should provide a breakout between new construction and renovation cost per square foot. Other facility projects need only complete Parts B.-E. Please also discuss and justify the cost per square foot for this project.**

If the project involves none of the above, describe the development of the proposal.

There are three components of this project which involve construction and/or renovation of the physical plant:

1. Expansion of the Neonatal Intensive Care Unit (NICU). The NICU is located on the 3rd floor of the North Pavilion. It has 67 beds/basinets. The NICU currently consists of 26,851 square feet of space. Of this, 15,432 square feet, which is an "open floor" unit (no dividing walls between bassinets) with 33 beds, will be renovated into separately walled, single occupancy rooms. This is the second phase of renovation to the NICU. The first phase was completed in February, 2007 and consisted of essentially the same changes – converting a multi-basinet, open floor unit to separately walled, mostly single rooms.

The NICU will also be expanded by adding a new construction addition adjoining the current unit on the north side. This will be accomplished by building new space on what is now the roof of the 2nd floor. The new construction will consist of 9,758 square feet. No additional NICU beds are being requested. The additional space is needed in order for the entire NICU to comply with new codes requirements, and to provide infants and families with adequate and comfortable space.

2. A new Intensive Care Unit (ICU) will be located on the 4th floor of the North Pavilion. This new construction addition will adjoin the current building, and will be on top of the new space constructed for the NICU on the 3rd floor. It will consist of 16,850 square feet of new space. In addition, minor renovation will be required to the elevator lobby (mainly for purpose of adjoining the existing building to the newly constructed addition) which renovation will consist of 1,262 square feet. This addition will house the 16 requested additional beds for the ICU.

3. Renovation of the 6th floor of the South Tower. This space consists of 12,000 square feet and is currently not used for inpatient care; it houses outpatient physician clinical offices. This space will be renovated and converted to general acute care bed space. The offices currently occupying the space will be relocated to a medical office building on the UTMC campus. This space will house 28 of the additional beds requested. All rooms will

be single occupancy.

A completed Square Footage and Cost per Square Foot Chart is attached on the following page.

B. Identify the number and type of beds increased, decreased, converted, relocated, designated, and/or redistributed by this application. Describe the reasons for change in bed allocations and describe the impact the bed change will have on the existing services.

UTMC is requesting a total of 44 additional acute care beds. The 44 beds will be allocated as follows:

- 28 beds for general acute medical/surgical patients, to be located in the renovated space on the 6th floor of the South Pavilion.
- 16 beds for ICU patients, to be located in the newly constructed ICU on the 4th floor of the North Pavilion.

These bed additions are needed in order to address the overwhelming demand for beds UTMC has and is experiencing. The need for the beds is addressed in detail in Section C, I, Need of this application. The bed addition will not impact other services of the hospital, but will allow UTMC to better meet the needs of its patients and provide more effective and efficient inpatient services.

SQUARE FOOTAGE AND COST PER SQUARE FOOTAGE CHART

A. Unit / Department	Existing Location	Existing SF	Temporary Location	Proposed Final Location	Proposed Final Square Footage			Proposed Final Cost/ SF		
					Renovated	New	Total	Renovated	New	Total
NICU	3rd Floor	26,851	NA	3rd Floor	15,432	9,758	25,190	$200	$336.43	$6,369,256
New ICU	NA	NA	NA	4th Floor	1,262	16,850	18,112	$200.10	$345.74	$6,078,248
6 South	NA	NA	NA	6 South	12,000		12,000	$298.67		$3,584,000
B. Unit/Depart. GSF Sub-Total										
C. Mechanical/ Electrical GSF	Included above									
D. Circulation /Structure GSF	Included above Included above									
E. Total GSF										$16,031,504

C. **As the applicant, describe your need to provide the following health care services (if applicable to this application):**

N/A. This application does not involve the initiation of any health care service.

1. **Adult Psychiatric Services**
2. **Alcohol and Drug Treatment for Adolescents (exceeding 28 days)**
3. **Birthing Center**
4. **Burn Units**
5. **Cardiac Catheterization Services**
6. **Child and Adolescent Psychiatric Services**
7. **Extracorporeal Lithotripsy**
8. **Home Health Services**
9. **Hospice Services**
10. **Residential Hospice**
11. **ICF/MR Services**
12. **Long-term Care Services**
13. **Magnetic Resonance Imaging (MRI)**
14. **Mental Health Residential Treatment**
15. **Neonatal Intensive Care Unit**
16. **Non-Residential Methadone Treatment Centers**
17. **Open Heart Surgery**
18. **Positron Emission Tomography**
19. **Radiation Therapy/Linear Accelerator**
20. **Rehabilitation Services**
21. **Swing Beds**

D. **Describe the need to change location or replace an existing facility.**

N/A. This application does not involve the relocation or replacement of a healthcare facility.

E. **Describe the acquisition of any item of major medical equipment (as defined by the Agency Rules and the Statute) which exceeds a cost of $2 million; and/or is a magnetic resonance imaging (MRI) scanner, positron emission tomography (PET) scanner, extracorporeal lithotripter and/or linear accelerator by responding to the following:**

N/A. This application does not involve any major medical equipment.

1. **For fixed-site major medical equipment (not replacing existing equipment):**
   a. **Describe the new equipment, including:**
      1. **Total cost ;(As defined by Agency Rule).**

2. **Expected useful life;**

3. **List of clinical applications to be provided; and**

4. **Documentation of FDA approval.**

b. **Provide current and proposed schedules of operations.**

2. **For mobile major medical equipment:**

a. **List all sites that will be served;**
b. **Provide current and/or proposed schedule of operations;**
c. **Provide the lease or contract cost.**
d. **Provide the fair market value of the equipment; and**
e. **List the owner for the equipment.**

3. **Indicate applicant's legal interest in equipment (*i.e.*, purchase, lease, etc.) In the case of equipment purchase include a quote and/or proposal from an equipment vendor, or in the case of an equipment lease provide a draft lease or contract that at least includes the term of the lease and the anticipated lease payments.**

III. (A) **Attach a copy of the plot plan of the site on an 8 1/2" x 11" sheet of white paper which must include:**

1. **Size of site (*in acres*);**
2. **Location of structure on the site; and**
3. **Location of the proposed construction.**
4. **Names of streets, roads or highway that cross or border the site.**

Please note that the drawings do not need to be drawn to scale. Plot plans are required for all projects.

A plot plan for the UTMC Campus is attached as Attachment B, III, (A).

(B) 1. **Describe the relationship of the site to public transportation routes, if any, and to any highway or major road developments in the area. Describe the accessibility of the proposed site to patients/clients.**

UTMC is located on Alcoa Highway, a major public highway. It is located approximately 3 miles from Interstates 40 and 75. It is on a public transportation (bus) route, although most patients come to the hospital by private car or by ambulance.

IV. **Attach a floor plan drawing for the facility which includes legible labeling of patient care rooms (noting private or semi-private), ancillary areas, equipment areas, etc. on an 8 1/2" x 11" sheet of white paper.**

NOTE: *DO NOT SUBMIT BLUEPRINTS*. Simple line drawings should be submitted and need not be drawn to scale.

Floors plan drawings for all areas of the hospital affected by construction, renovation and/or bed additions are attached as collective Attachment B, IV.

V. **For a Home Health Agency or Hospice, identify:**

N/A.

1. **Existing service area by County;**
2. **Proposed service area by County;**
3. **A parent or primary service provider;**
4. **Existing branches; and**
5. **Proposed branches.**

SECTION C: GENERAL CRITERIA FOR CERTIFICATE OF NEED

In accordance with Tennessee Code Annotated § 68-11-1609(b), "no Certificate of Need shall be granted unless the action proposed in the application for such Certificate is necessary to provide needed health care in the area to be served, can be economically accomplished and maintained, and will contribute to the orderly development of health care." The three (3) criteria are further defined in Agency Rule 0720-4-.01. Further standards for guidance are provided in the state health plan (Guidelines for Growth), developed pursuant to Tennessee Code Annotated §68-11-1625.

The following questions are listed according to the three (3) criteria: (I) Need, (II) Economic Feasibility, and (III) Contribution to the Orderly Development of Health Care. Please respond to each question and provide underlying assumptions, data sources, and methodologies when appropriate. *Please type each question and its response on an 8 1/2" x 11" white paper*. All exhibits and tables must be attached to the end of the application in correct sequence identifying the question(s) to which they refer. If a question does not apply to your project, indicate "Not Applicable (NA)."

QUESTIONS

I. NEED

1. Describe the relationship of this proposal toward the implementation of the State Health Plan and Tennessee's Health: Guidelines for Growth.

a. Please provide a response to each criterion and standard in Certificate of Need Categories that are applicable to the proposed project. Do not provide responses to General Criteria and Standards (pages 6-9) here.

The State Health Plan includes the following aspirational goals for health care delivery in Tennessee:

Five Principles for Achieving Better Health from the Tennessee State Health Plan:

1. Healthy Lives

The purpose of the State Health Plan is to improve the health of Tennesseans.

Every person's health is the result of the interaction of individual behaviors, society, the environment, economic factors, and our genetic endowment. The State Health Plan serves to facilitate the collaboration of organizations and their ideas to help address health at these many levels.

This is a policy statement to which no response is necessary.

2. Access to Care

Every citizen should have reasonable access to health care. Many elements impact one's access to health care, including existing health status, employment, income, geography, and culture. The State Health Plan can provide standards for reasonable access, offer policy direction to improve access, and serve a coordinating role to expand health care access.

UTMC is accessible to all patients regardless of socio-economic status, ethnicity or payor source. UTMC participates in Medicare and TennCare, and contracts with all TennCare MCOs operating in the region.

3. Economic Efficiencies

The state's health care resources should be developed to address the needs of Tennesseans while encouraging competitive markets, economic efficiencies and the continued development of the state's health care system. The State Health Plan should work to identify opportunities to improve the efficiency of the state's health care system and to encourage innovation and competition.

UTMC is an excellent steward of the state's health care resources. As the only academic medical center in the region, UTMC provides a training site, educational resources, and of course patients for the training of future physicians and other health care practitioners. It is the only Level I Trauma Center in its 21 county primary service area. Its services include a Level III NICU, providing lifesaving care for critically ill newborns. And UTMC maintains its facilities, equipment and services so as to remain innovative, efficient, and competitive in a robust health care market place.

4. Quality of Care

Every citizen should have confidence that the quality of health care is continually monitored and standards are adhered to by health care providers. Health care providers are held to certain professional standards by the state's licensure system. Many health care stakeholders are working to improve their quality of care through adoption of best practices and data-driven evaluation.

UTMC will continue to provide the highest quality of care to its patients. It is in good standing with the Tennessee Board for Licensing Health Care Facilities, and is accredited by and in good standing with the Joint Commission. UTMC has received numerous awards and recognitions of the high quality of care it provides. UTMC received Magnet designation in 2011. Magnet designation recognizes excellence in patient care, nursing outcomes and innovation in professional nursing practice. In addition to the Magnet designation, UTMC was awarded a Level III achievement

from the Tennessee Center for Performance Excellence in 2012. A list of recent recognitions is attached as Attachment C, I, Need, I.

5. Health Care Workforce

The state should support the development, recruitment, and retention of a sufficient and quality health care workforce. The state should consider developing a comprehensive approach to ensure the existence of a sufficient, qualified health care workforce, taking into account issues regarding the number of providers at all levels and in all specialty and focus areas, the number of professionals in teaching positions, the capacity of medical, nursing, allied health and other educational institutions, state and federal laws and regulations impacting capacity programs, and funding.

UTMC is a major employer in the greater Knoxville area, employing over 4,000 individuals. Its employed health care staff -- which includes but is not limited to physicians, mid-level providers, and nurses – represents strong clinical specialties among a diverse workforce. UTMC is staffed at a level which complies with all licensure and accreditation guidelines, and which assures high quality patient care while maintaining efficiencies. UTMC is also the only academic medical center in the region, providing a training site and educational resources for future physicians and a large number of other clinical specialties. Please see the discussion in response to Question C, III, Orderly Development 6 and the attachment thereto.

[End of responses to Five Principles for Achieving Better Health]

The State Health Plan has not yet updated the Acute Care Bed Need Services guidelines, so the following from the Guidelines for Growth are still in effect.

ACUTE CARE BED NEED SERVICES

1. The following methodology should be used and the need for hospital beds should be projected four years into the future from the current year.

Using the latest utilization and patient origin data from the Joint Annual Report of Hospitals and the most current population projection series from the Department of Health, perform the following:

The applicant incorporates the calculation of bed need as performed by the Department of Health. Therefore, the recitation of the bed need formula from the Guidelines is not repeated here.

A table showing the bed need calculations for the service area, extracted from the state-wide calculations from the Department of Health are attached as Attachment C,

I, Need, 1, (1). Behind that document is the complete state-wide calculations from the Department of Health.

According to those documents, there is a calculated bed surplus in the service area of 1,250 beds based on licensed beds, and a surplus of 593 beds based on 2012 staffed beds as reflected in the 2012 JARs. For Knox County, the calculated surplus is 263 based on licensed beds, and 163 based on staffed beds.

The calculated bed surplus does not obviate UTMC's need for the requested 44 beds for the reasons explained below.

UTMC's Need for Medical Surgical Beds:

The University of Tennessee Medical Center, the region's only academic medical center, serves as the regional referral center and sole Level I trauma center for a 21 county service area. The current number of medical-surgical beds is not adequate to provide care for all patients who are referred for acute care. The following facts clearly evidence the need for additional medical surgical beds.

As reflected on Attachment C, I, Need, 1, Chart 1 in 2013 the adult medical surgical occupancy rate averaged 89.1%, and exceeded 85% every month. There is very little fluctuation in the occupancy – the beds are consistently highly utilized.

As reflected on Attachment C, I, Need, 1, Chart 2 in 2013 the 11 adult med-surg units at UTMC averaged 95% or greater occupancy 165 days during the year, and 90% or greater occupancy 232 days during the year.

As reflected on Attachment C, I, Need, 1, Chart 3 in 2013 the adult med-surg units experienced a daily occupancy of 95% or greater occupancy 81 days during the year, and 80% or greater occupancy 325 days during the year.

Below are several additional contributing factors that necessitate additional medical-surgical, acute care beds to accommodate the current needs of the region:

- The number of referrals not accepted YTD July 2014 is 384. Of those, 229 were critical care patients, leaving 155 patients who needed an general medical surgical bed. If this trend continues there will be over 650 patients in 2014 who need the services of UTMC, but could not be served due to unavailability of beds.
- Emergency Room visits have increased from 64,500 in 2009 to over 85,000 in 2013. Over 40% of all patients who are treated in the emergency room require use of an acute care bed during the patient's stay. The lack of available beds leads to internal queuing and inefficiencies. In 2014, the average E.D. hold time (the time

E.D. patients needing an inpatient bed are required to wait for a bed to become available) has been 235 hours per day. This is drastic increase from 2013, and reflects the serious bed shortage UTMC is facing.

UTMC Emergency Department Historic and Projected Visits By Level of Acuity					
ED Visits by Acuity Level	CY2013	CY 2014 (Annualized)	Projected Visits CY2015	Projected Visits CY2016	E.D. Holds (Hours)
Level I	865	950	959	969	
Level II	15,734	17,715	17,882	18,061	
Level III	41,166	39,812	40,188	40,590	
Level IV	20,698	20,367	20,559	20,765	
Level V	1,982	2,277	2,299	2,322	
Trauma	4,288	4,176	4,215	4,258	
Totals	84,733	85,296	86,102	86,964	
Treatment Stations	48	57	57	57	
Visits Per Station	1,765	1,496	1,511	1,526	
					2013: 92 average hold hours a day
Source: Internal hospital records					2014: 235 average hold hours a day

UTMC's Need for Critical Care Beds

In addition to being the region's only academic medical center and only Level I trauma center for a 21 county service area, it is one of five Joint Commission accredited Comprehensive Stroke Centers[1] in the state and is the only fully trained Adam Williams Initiative hospital[2] in Tennessee. These distinctions mark UTMC as having the infrastructure, staff, equipment and training necessary to provide the highest level of care to the most complex and critically ill patients in our region.

Over the last several years UTMC has been unable to provide care to all the patients in the region who needed the specialized intensive care services offered at UTMC. Each year the hospital is forced to turn away patients referred to it from other hospitals in the region due to a lack of capacity. In 2013, UTMC declined to accept for transfer 144 patients requiring adult intensive care treatment. In 2014, that

[1] The Joint Commission and American Heart Association/American Stroke Association Comprehensive Stroke Center designation is an advanced certification recognizing hospitals with the specific abilities to receive and treat the most complex stroke cases leading to better patient outcomes.

[2] The Adam Williams Initiative is a philanthropic foundation endorsed by the Brain Trauma foundation, the American Association of Neurological Surgeons and the National Foundation for Trauma Care. The foundation provides free training and capital equipment to military and civilian trauma centers for the treatment of severe traumatic brain injuries. The Initiative's goal is to help establish a higher standard of care for traumatic brain injury patients.

number increased to 229 patients from January - August. If this continues that number could reach 344 by the end of the year.

Of the patients refused transfer to UTMC, 16.2% of the patients this year were patients suffering a neurological injury/illness, 40.6% suffered from an acute medical illness that exceeded the ability of the hospital currently providing care, necessitating transfer to a facility with more resources in terms of equipment, training and specialized care providers. As of August 31, 2014, UHS has a Medicare case mix index of 2.00. Case mix index is a relative measure of patient acuity. The national average Medical case mix index is 1.52 based on 2013 data. Having such a high CMI value reflects the clinical complexity and resources needed for the patients cared for by UTMC and further demonstrates the ability of UTMC to provide the highest level of care possible to the most critically ill and injured patients.

Due to capacity constraints and a record volume of requests for transfers to UTMC ICUs from the region, the hospital has been on critical (intensive) care hold 114 of the 243 days elapsed January through August in 2014. The result is an increase in the average number of days being on critical (intensive) care unit hold of 9 per month in 2013 to 14 per month in 2014. Thus in 2014 ICU patients were declined for transfer to UTMC's ICU roughly 47% of the time.

Requests for ICU patient transfers tend to come in clusters particularly when UTMC is on critical (intensive) care hold. As many as 8 patients in one 24 hour period have been refused for transfer to UTMC due to all intensive care units being full to capacity. UTMC aims to maintain a goal occupancy rate of 70% - 80% to maintain maximal efficiency and effectiveness.

August year-to-date 2014, there are multiple examples of between 10–14 patients requiring intensive care being unable to transfer to UTMC's ICU within a 3 consecutive day period. With an average ICU ALOS of 3.59 days, a 16 bed ICU would have an occupancy rate from 63% to 88%, while all other current ICUs would be running at 100% occupancy (on days the hospital is on critical (intensive) care unit hold).

The need for additional critical care beds at UTMC is clearly evidenced by the historical utilization and occupancy of the existing critical care beds:

As reflected on Attachment C, I, Need, 1, Chart 4 the adult critical care units occupancy rate averaged 78.3%, and exceeded 70% every month except for one. There is very little fluctuation in the occupancy – the beds are consistently highly utilized. And it is important to note that critical care beds, because they are distributed among smaller nursing units due to higher patient acuity, cannot be run at the 80% target threshold for all hospital bed types.

As reflected on Attachment C, I, Need, 1, Chart 5 in 2013 all adult critical care units at UTMC averaged 95% or greater occupancy on 78 days during the year, and 90% or greater occupancy on 115 days during the year.

As reflected on Attachment C, I, Need, 1, Chart 6 in 2013 the daily occupancy on all adult critical care units at UTMC exceeded 80% 183 days during the year, exceeded 85% on 104 days, exceeded 90% on 41 days, ,and exceeded 95% on 9 days.

These occupancies are clearly unacceptable for critical care beds. By increasing adult intensive care bed capacity UTMC will be better able to serve the needs of the residents and visitors in the region.

UTMC's Need for Teaching Beds

Another factor contributing to the need for addition beds relates to UTMC's position as the only academic medical center in the region. UTMC has a total of 210 Residents and Fellows (physicians in advanced training seeing patients every day and fulfilling our commitment as a teaching hospital and training the next generation of physicians). 18 of this number are in Dentistry (10 are in Oral-Maxillofacial Surgery and are essential to the trauma programs). 27 of these Residents/Fellows are supported through funding directly from UTMC.

In order to maintain accreditation for these training programs certain patient volumes and encounters are required. As medical schools are encouraged to increase enrollments to meet the projected physician shortages, additional resident/fellow positions will be required at teaching hospitals/academic medical centers. This will also contribute to the need for additional beds in the future.

The need for additional teaching beds, whether they be medical surgical or critical care, cannot be quantified, but this is nonetheless an important contributing factor to be taken into account.

Verification of Bed Need Projections -- Poisson Probability Bed Need

UTMC is requesting a total of 44 addition acute care beds. Of these, 28 will be allocated to general medical surgical use and 16 will be allocated to critical care use. In order to verify the need for additional beds, and the number of requested beds, UTMC applied the Poisson Probability Bed Need methodology. The results are reflected in Attachment C, I, Need, 1, Chart 7.

The Poisson Probability Bed Need methodology is a statistically valid methodology, generally accepted by health planning professionals. It calculates the number of beds needed by an inpatient facility in order for that facility to have a given level of likelihood of having a bed available when needed. For example, the 90% probability target means that if the facility has the calculated number of beds, there is a 90% likelihood one will be available when needed.

This projection methodology is the same approach used in the Acute Care Bed Need Services formula found in *Guidelines for Growth, 2000 Edition.* For purposes of this projection, we considered only adult ICU beds and adult medical surgical beds. Rather than applying the formula to the entire service area, UTMC instead applied it to UTMC based on historical utilization.

1. "The need for hospital beds should be projected four years into the future from the current year." UTMC's projection year is 2018.

2. "Determine the current Average Daily Census (ADC) in each county." The service area is comprised of UTMC's traditional 21 service area counties. In determining its own bed need, UTMC calculated its own ADC, rather than that for the service area as a whole. The 2013 average daily census (ADC) is based upon actual hospital-wide experience at UTMC for the adult medical/surgical beds and the adult ICU beds.[3]

3. "Determine the service area population (SAP) in both the current and projected year." Population estimates and projections were obtained from the Tennessee Office of Health Statistics, revised 6/2013. The UTMC 21-county SAP growth rate is 4.8% for the period from 2013 to 2018.

4. "Determine the projected Average Daily Census as: Projected ADC = Current ADC x (Projected SAP ÷ Current SAP)." Current 2013 UTMC ADC was multiplied by (1 + 4.8%) to yield projected 2018 UTMC ADC.

5. "Calculate Projected Bed Need for each county as: Projected Need = Projected ADC + 2.33 x √(Projected ADC)." According to a normal probability distribution function, 2.33 is the Z Score that corresponds with 99% probability of having a bed available when a bed is needed. For sensitivity purposes, and to be conservative with bed need projections, UTMC also provides the 90% probability (Z = 1.28) and the 95% probability (Z = 1.645).

6. Determine the 2018 Projected Net Bed Need as: 2018 Net Bed Need or (Surplus) = 2018 Projected Need - 2013 Licensed Beds. Since it is impossible to have a fraction of a bed available, Projected Need is always rounded up to the next whole integer (e.g., 15.1 ≠ 15, 15.1 = 16; 15.9 = 16).

The results of applying the formula to UTMC reflect the following:

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[3] UTMC does not maintain a separate unit for observation patients, or even outpatient bedded patients. Observation patients are cared for on the nursing units in the unit most closely associated with the patient's diagnosis. Though observation patients are a rarity in the ICU units, some are distributed among the medical/surgical units. Like many hospitals without distinct observation units, UTMC's bed need must consider the mix of traditional inpatients with observation patients, etc. These distinctions are becoming even more blurred with federal implementation of the 2-Midnight Rule. However these various patients are categorized for reimbursement purposes, there is no distinction operationally and all require a bed.

Conclusion: UTMC's request for 16 additional adult ICU beds and 28 additional adult medical/surgical beds is consistent with Projected Bed Need at the 90% probability (17 beds and 57 beds, respectively), the 95% probability (25 beds and 79 beds, respectively) as well as the 99% probability (39 beds and 118 beds, respectively). Rather than seeking the full 157 additional beds (39 + 118 = 157) according to the 99% probability using the official acute care bed need methodology, UTMC is seeking far fewer beds – only 44 additional beds (16 + 28 = 44).

Approval of UTMC's request for 16 additional adult ICU beds and 28 additional adult medical/surgical beds will result in 91 total adult ICU beds (75 + 16 = 91) and 402 total adult medical/surgical beds (337 +5 previously out of service + 32 to be put in service in the Heart Hospital in November +28 = 402). With a projected ADC of 62.1 and 298.6, respectively, UTMC's 2018 projected occupancy, based on this methodology, is nearly 70% for adult ICU (62.1 ÷ 91 = 68.2%) and nearly 75% for adult medical surgical (300.8 ÷ 402 = 74.3%).[4]

Conclusion: The official Acute Care Bed Need Services methodology found in *Guidelines for Growth, 2000 Edition* projects a surplus of beds in Knox County, UTMC's 21-county service area and throughout the entire state. The same methodology, applied to UTMC itself, projects a need for additional adult ICU beds and adult medical/surgical beds. That a single methodology produces such disparate results testifies to the high utilization at UTMC and requires further evaluation. Therefore, UTMC also presents bed need projections based upon additional factors that are specific to its tertiary regional referral hospital role.

2. New Hospital beds can be approved in excess of the "need standard for a county" if the following criteria are met:

a) All existing hospitals in the projected service area have an occupancy level greater than or equal to 80 percent for the most recent Joint Annual Report. Occupancy should be based on the number of licensed beds that are staffed for two consecutive years.

According to data received from the Department of Health, this occupancy threshold is not met. The average occupancy rates for hospitals in the service area are 46.7% on licensed beds, and 53.6% on staffed beds.

This does not obviate the need for the requested beds at UTMC. The immediately preceding response explains UTMC's need for the beds, regardless of any surplus of

[4] The projected utilization charts shown in response to Question C, I, Need, 6 reflect different occupancy rates, because those are based on the applicant's actual historical growth in patient days, whereas the Poisson methodology is based on the service area population growth rate only. Accordingly, this is a much more conservative methodology and results in lower projected occupancy.

beds in the service area as a whole. This need is verified by applying the bed need formula to UTMC's historical utilization.

Additionally, the unique and specialized services provided by UTMC, as well as patient choice and physician preference, all strongly support the need for additional bed capacity at UTMC, and dictate against a strategy of continuing to turn away would-be admissions with the patients presumably finding a bed at another area hospital.

UTMC is a tertiary, regional referral hospital with significant admissions coming from throughout the 21 county primary service area and beyond. "A bed is a bed" is not a truism that applies to UTMC. While there are many high quality hospitals in the service area, UTMC is unique among these in that it offers all of the following special services:

- Area's only Academic Medical Center
- Area's only Level I Trauma Center
- Renal Transplant Center
- Regional Perinatal Center (Level II and III NICU)
- Pediatric Heart Program
- Hemophilia Center
- Adult Cystic Fibrosis Center
- LIFESTAR Aeromedical Program

The number of declined admissions at UTMC due to the unavailability of beds is significant and growing. (See discussion in response to the immediately preceding question). The additional capacity at UTMC will remedy this, at least for the time being, and allow the hospital to admit and treat patients for whom they, their families and/or physicians have determined that UTMC is the provider of choice.

b) All outstanding CON projects for new acute care beds in the proposed service area are licensed.

There are no unimplemented CONs for additional acute care beds in the service area.

c) The Health Facilities Commission may give special consideration to acute care bed proposals for specialty health service units in tertiary care regional referral hospitals.

UTMC is a tertiary care regional referral hospital. Significant numbers of referrals and admissions are received from the defined 21 county service area. UTMC is the only Level I Trauma Center in the service area, resulting in a high volume of E.D. visits and admissions. UTMC is also the only academic medical center in the region, providing a training site and educational resources for future physicians and other health care practitioners.

[End of responses to Acute Care Bed Need Services from the Guidelines for Growth]

The Guidelines for Growth also includes standards and criteria for hospital expansion and renovation projects. Responses to these are reflected below.

CONSTRUCTION, RENOVATION, EXPANSION, AND REPLACEMENT OF HEALTH CARE FACILITIES.

1. Any project that includes the addition of beds, services, or medical equipment will be reviewed under the standards for those specific activities.

Responses to the Acute Care Bed Need Services guidelines are included in the immediately preceding section.

2. For relocation or replacement of existing licensed health care institution:

a. The applicant should provide plans which include costs for both renovation and relocation, demonstrating the strengths and weaknesses of each alternative.

N/A. This application does not include a replacement facility or relocation.

3. For renovation or expansions of an existing licensed health care institution:

a. The applicant should demonstrate that there is an acceptable existing demand for the proposed project.

NICU Expansion: Of the 67 licensed NICU beds, 33 of those are currently housed on an open floor which has no dividing walls between the beds. There is also no external natural lighting available on this unit. While the highest level of care is obviously still provided on this unit, the private rooms, larger per bed space, and external lighting are all significant improvements in comfort and privacy for the infants and their families. There is no space available within the walls to provide these improvements, so the proposed addition is necessary.

This is the second phase of renovation to the NICU. The first phase was completed in February, 2007 and consisted of essentially the same changes – converting a multi-

basinet, open floor unit to separately walled, mostly single rooms. This proposed second phase will complete the renovation and modernization of the 67 bed NICU. No beds are being added to the NICU.

ICU Expansion/Addition: UTMC currently has 80 ICU/CCU beds. Occupancy on the ICU beds runs extremely high, and additional capacity is needed. UTMC intends to allocate 16 of the requested 44 additional acute care beds to ICU use. The need for these beds is addressed elsewhere in this application. There is no physical space within the walls to house the beds, so the addition is necessary. The proposed addition of the NICU will extend out over what is now the roof of the 2nd floor, and the proposed ICU addition will be constructed on top of the NICU addition.

Renovation/Conversion of 6th Floor South to Inpatient Rooms: UTMC proposes to allocate 28 of the requested 44 additional acute care beds to general medical/surgical use. The need for these beds is addressed elsewhere in this application. These 28 new med/surg beds will be located on the 6th floor of the East Pavilion. This space is currently being used for non-inpatient care purposes. These existing uses will be relocated to existing space in a medical office building on the campus. The space will be renovated into 28 private inpatient rooms. This is a more cost effective approach than new construction, although specific cost estimates for new construction of roughly 12,000 square feet of new construction were not obtained.

b. The applicant should demonstrate that the existing physical plant's condition warrants major renovation or expansion.

The renovations being made to the existing space is not based on the condition of the physical plant. As explained above, the renovations are being made to accommodate and tie into the new space, and/or to convert the use of the space.

[End of responses to Renovation/Expansion Guidelines]

b. Applications that include a Change of Site for a health care institution, provide a response to General Criterion and Standards (4)(a-c)

N/A.

2. Describe the relationship of this project to the applicant facility's long-range development plans, if any.

Long range planning and development is an on-going process at UTMC, in order to keep pace with patients' needs and demands for services. Over the last approximately 10 years, UTMC has received CON approvals for the following projects:

- Addition of a PET/CT (CN0310-089A)
- Addition of a Cyber Knife (CN0402-007A)

- Addition of a second Linear Accelerator (CN0803-019A)
- Construction of a 4 floor addition for cardiac services now known as the Heart Hospital (CN0801-004A)
- Build out of the 3rd and 4th floors of the Heart Hospital (originally shelled space) (CN0912-056A)
- Addition of a 3.0 Tesla MRI (CN1002-008A)
- A 28,000 square foot expansion of the surgical facilities and a net increase of 10 ORs (CN1005-022A)

As previously mentioned, UTMC also accomplished the Phase I modernization of the NICU in February, 2007 which did not require CON approval.

All of these improvements and expansions have been accomplished without any addition of acute care beds. Now the demand for inpatient beds and the extremely high utilization of existing beds, discussed above and elsewhere in the application, necessitates additional beds. UTMC has taken interim measures to free up bed space, and while those steps have provided some limited temporary relief, only the additional licensed beds can provide the additional inpatient capacity needed. The interim measures taken by UTMC to maximize bed capacity are described in response to question C, II, Economic Feasibility 11.

3. **Identify the proposed service area and justify the reasonableness of that proposed area. Submit a county level map including the State of Tennessee clearly marked to reflect the service area. Please submit the map on 8 1/2" x 11"**

The primary service area consists of the following 21 counties: Anderson, Blount, Campbell, Claiborne, Cocke, Cumberland, Fentress, Grainger, Hamblen, Hancock, Hawkins, Jefferson, Knox, Loudon, McMinn, Monroe, Morgan, Roane, Scott, Sevier, and Union. Residents of these counties accounted for 25,108, or 92.5%, of the 27,143 total discharges from UTMC in 2013.

A map of the service area is attached as Attachment C, I, Need, 3.

4. **A. Describe the demographics of the population to be served by this proposal.**

A table reflecting the population and relevant demographics of the service area is attached as Attachment C, I, Need, 4.

B. Describe the special needs of the service area population, including health disparities, the accessibility to consumers, particularly the elderly, women, racial and ethnic minorities, and low-income groups. Document how the business plans

of the facility will take into consideration the special needs of the service area population.

As reflected in the Population and Demographics table attached as Attachment C, I, Need, 4, there are several relevant demographic characteristics of the service area population which support the need for additional inpatient capacity at UTMC.

Every county in the service area has a larger percentage of residents age 65+ to the total population than does the state as a whole.

14 of the 21 counties in the service area have a larger proportion of TennCare enrollees than does the state as a whole.

13 of the 21 counties in the service area have a larger proportion of its population living below poverty level than does the state as a whole.

So in general, the service area population is older and poorer than the population of the state as a whole. The elderly population tend to be heavier users of medical services, including inpatient hospital services, than does the younger population. So having beds available at UTMC to meet this population's health needs is important. UTMC's services are available to all regardless of financial status or payor source. UTMC is in network with all TennCare MCOs in the region. So the economically disadvantaged would benefit from this proposal as well.

5. **Describe the existing or certified services, including approved but unimplemented CONs, of similar institutions in the service area. Include utilization and/or occupancy trends for each of the most recent three years of data available for this type of project. Be certain to list each institution and its utilization and/or occupancy individually. Inpatient bed projects must include the following data: admissions or discharges, patient days, and occupancy. Other projects should use the most appropriate measures, e.g., cases, procedures, visits, admissions, etc.**

Data from the Department of Health reflecting beds, patient days and occupancy for each hospital in the 21 county service area is attached as Attachment C, I, Need, 5 (1). This is the most recent compiled data the Department of Health has available. Although it does not reflect 3 years of data, this should be considered sufficient since: (1) occupancy rates are clearly below the 80% threshold, and the applicant does not dispute that; and (2) the need for the beds at UTMC is not obviated by the fact there are open beds elsewhere in the service area. Please see the discussion in response to standard 2 of the Acute Care Bed Needs, earlier in this application.

A list of the outstanding CONs held by hospitals in the service area is attached as Attachment C, I, Need, 5 (2). There are no unimplemented CONs for additional acute care beds in the service area. These projects will not impact, or be impacted by, this project.

6. **Provide applicable utilization and/or occupancy statistics for your institution for each of the past three (3) years and the projected annual utilization for each of the two (2) years following completion of the project. Additionally, provide the details regarding the methodology used to project utilization. The methodology must include detailed calculations or documentation from referral sources, and identification of all assumptions.**

The historic utilization of adult medical surgical and adult critical care beds at UTMC and the projected utilization of the requested beds are reflected in the tables below.

UTILIZATION OF MEDICAL – SURGICAL BEDS UTMC 2012 through PROJECT YEAR 2						
Year	Med-surg Beds	Inpatient Days	Average Occupancy without Obsv. Days	Observation Days	Total Patient Days	Total Average Occupancy with Obsv. Days
Historic						
CY2012	327	82,852	69.4%	15,888	98,740	82.7%
CY2013*	319	87,822	75.4%	16,154	103,976	89.3%
CY2014**	342	91,208	73.1%	25,013	116,220	93.1%
Projected						
Year 1	402	106,303	72.4%	21,261	127,564	86.9%
Year 2	402	107,366	73.2%	21,473	128,840	87.8%
**Excluded 4E because unit had to be temoporarily closed frm Jan.-Sept.*						
***Annualized on 8 months data*						
Source: Internal hospital records						

PROJECTED UTILIZATION OF ADDITIONAL MED-SURG BEDS UTMC FLOOR 6 SOUTH – through PROJECT YEAR 2						
Year	No. of Beds	Inpatient Days	Average Occupancy without Obsv. Days	Observation Days	Total Patient Days	Total Average Occupancy with Obsv. Days
Historic						
CY2012						
CY2013						
CY2014*						
Projected						
Year 1	28	7,358	72.0%	1,840	9,198	90.0%
Year 2	28	7,506	73.4%	1,876	9,382	91.8%

UTILIZATION OF CRITICAL CARE BEDS (Excludes Pediatric ICU) ICU UTMC 2012 through PROJECT YEAR 2				
Year	**Critical Care Beds**	**Inpatient Days**	**Average Occupancy without Obsv. Days****	**Observation Days**
Historic				
CY2012	75	21,687	79.2%	n/a
CY2013	75	21,563	78.8%	n/a
CY2014*	75	22,346	81.6%	n/a
Projected				
Year 1	91	27,241	82.0%	n/a
Year 2	91	27,606	83.1%	n/a

UTILIZATION OF ADDITIONAL BEDS UTMC NEW ICU Through PROJECT YEAR 2				
Year	**No. of Beds**	**Inpatient Days**	**Average Occupancy without Obsv. Days***	**Observation Days**
Historic				
CY2012				
CY2013				
CY2014*				
Projected				
Year 1	16	4672	80.0%	n/a
Year 2	16	4765	81.6%	n/a

** There very few observation days on the critical care units.*

These projections were derived by extrapolating historic growth rates for both inpatient and observation days at UTMC. It was assumed the inpatient growth rates would remain constant throughout the projection period. Downward adjustments were made to the observation days, because it is believed the most recent accelerated growth in observation days is spawned in part by recent CMS policy changes, e.g., the "two midnight rule." Also taken into consideration was the number of referrals and transfers to UTMC that had to be refused due to a lack of beds. Different time bases were applied to the different units, because the med-surg unit is projected to open before the critical care unit.

II. ECONOMIC FEASIBILITY

1. **Provide the cost of the project by completing the Project Costs Chart on the following page. Justify the cost of the project.**

    - **All projects should have a project cost of at least $3,000 on Line F. (Minimum CON Filing Fee). CON filing fee should be calculated from Line D. (See Application Instructions for Filing Fee)**
    - **The cost of any lease (building, land, and/or equipment) should be based on fair market value or the total amount of the lease payments over the initial term of the lease, whichever is greater. Note: This applies to all equipment leases including by procedure or "per click" arrangements. The methodology used to determine the total lease cost for a "per click" arrangement must include, at a minimum, the projected procedures, the "per click" rate and the term of the lease.**
    - **The cost for fixed and moveable equipment includes, but is not necessarily limited to, maintenance agreements covering the expected useful life of the equipment; federal, state, and local taxes and other government assessments; and installation charges, excluding capital expenditures for physical plant renovation or in-wall shielding, which should be included under construction costs or incorporated in a facility lease.**

For projects that include new construction, modification, and/or renovation; documentation must be provided from a contractor and/or architect that support the estimated construction costs.

A completed Project Cost Chart is attached following this response.

Justification of the reasonableness of the estimated cost is provided in response to question C, II, Economic Feasibility, 3 below.

A letter from the project architect is attached as Attachment C, II, Economic Feasibility, 1.

PROJECT COSTS CHART

A.	Construction and equipment acquired by purchase:	
	1. Architectural and Engineering Fees	$ 801,576.00
	2. Legal, Administrative, Consultant Fees	$ 45,000.00
	3. Acquisition of Site	NA
	4. Preparation of Site	NA
	5. Construction Costs	$ 16,031,504.00
	6. Contingency Fund	$ 2,404,726.00
	7. Fixed Equipment (Not included in Construction Contract)	$ 2,604,230.00
	8. Moveable Equipment (List all equipment over $50,000.00) Omnicell $70,000	$ 4,359,965.00
	9. Other (Specify) _____	
B.	Acquisition by gift donation, or lease:	
	1. Facility (Inclusive of building and land)	$ -
	2. Building Only	$ -
	3. Land Only	$ -
	4. Equipment (Specify) _____	$ -
	5. Other (Specify) _____	$ -
C.	Financing Costs and Fees:	
	1. Interim Financing	$ -
	2. Underwriting Costs	$ -
	3. Reserve for One Year's Debt Service	$ -
	4. Other (Specify) _____	$ -
D.	Estimated Project Cost (A+B+C)	$ 26,247,001.00
E.	CON Filing Fee	$ 45,000.00
F.	Total Estimated Project Cost (D & E)	$ 26,292,001.00
	TOTAL	$ 26,292,001.00

2. Identify the funding sources for this project.

a. Please check the applicable item(s) below and briefly summarize how the project will be financed. ***(Documentation for the type of funding MUST be inserted at the end of the application, in the correct alpha/numeric order and identified as Attachment C, Economic Feasibility-2.)***

__ **A. Commercial loan--Letter from lending institution or guarantor stating favorable initial contact, proposed loan amount, expected interest rates, anticipated term of the loan, and any restrictions or conditions;**

__ **B. Tax-exempt bonds--Copy of preliminary resolution or a letter from the issuing authority stating favorable initial contact and a conditional agreement from an underwriter or investment banker to proceed with the issuance;**

__ **C. General obligation bonds—Copy of resolution from issuing authority or minutes from the appropriate meeting.**

__ **D. Grants--Notification of intent form for grant application or notice of grant award; or**

X **E. Cash Reserves--Appropriate documentation from Chief Financial Officer.**

A letter from the Chief Financial Officer for UTMC is attached as Attachment C, II, Economic Feasibility, 2.

__ **F. Other—Identify and document funding from all other sources.**

3. Discuss and document the reasonableness of the proposed project costs. If applicable, compare the cost per square foot of construction to similar projects recently approved by the Health Services and Development Agency.

The total estimated project cost is $26,292,001. The largest single item is the construction cost of $16,031,504, and a related contingency of $2,404,726. The reasonableness of this cost is verified by the project architect in Attachment C, II, Economic Feasibility, 1.

As reflected on the Square Footage and Cost Per Square Footage Chart, the cost for renovation range from $200 per square foot to $299 per square foot. The new construction costs range from $336 per square foot to $346 per square foot.

The renovation cost p.s.f. is slightly above the 3rd Quartile of approved CON hospital costs for applications approved 2011-2013, which is $249 p.s.f. The new

construction cost is likewise slightly above the 3rd Quartile of approved CON hospital costs for applications approved 2011-2013, which is $324 p.s.f. Part of the reason the UTMC estimated cost is higher is due to inflation, and part of it is due to the fact this construction job has challenges as far as extending out over a current roof area. This is generally more expensive that building on open ground.

The next largest cost is movable equipment at a cost of $4,359,965. No major medical equipment is involved. The only single piece of equipment is an Omnicell, which is a medication dispensing unit, which is state of the art and will be tied into patients' Electronic Health Records. All equipment purchases were negotiated at arms-length among experienced healthcare purchasers and vendors and are reasonable.

The Architectural and Engineering fees were likewise negotiated at arms-length and the professionals providing these services are experienced and well known to the management team at UTMC. These fees are reasonable.

3. **Complete Historical and Projected Data Charts on the following two pages--*Do not modify the Charts provided or submit Chart substitutions!* Historical Data Chart represents revenue and expense information for the last *three (3)* years for which complete data is available for the institution. Projected Data Chart requests information for the two (2) years following the completion of this proposal. Projected Data Chart should reflect revenue and expense projections for the *Proposal Only* (*i.e.*, if the application is for additional beds, include anticipated revenue from the proposed beds only, not from all beds in the facility).**

Attached on the pages following this response are the following:

A Historical Data Chart for UTMC.

A Projected Data Chart for the requested medical surgical beds.

A Projected Data Chart for the requested ICU beds.

HISTORICAL DATA CHART
UNIVERSITY HEALTH SYSTEM, INC

	2013	2012	2011
UTILIZATION/OCCUPANCY DATA			
Patient Days	145,140	140,304	141,965
Admissions	27,179	26,236	25,588
REVENUE FROM SERVICES TO PATIENTS			
Inpatient Services	$ 1,034,322,749	$ 937,230,432	$ 880,069,438
Outpatient Services	1,018,516,185	870,308,063	743,807,763
Emergency Services	92,401,748	80,512,914	68,241,021
Other Operating Revenue	36,292,682	36,995,697	36,690,667
GROSS OPERATING REVENUE	2,181,533,364	1,925,047,106	1,728,808,889
DEDUCTIONS FROM OPERATING REVENUE			
Contract Deductions	1,441,202,952	1,261,043,583	1,108,777,267
Provision for Charity Care	49,563,752	30,743,462	32,131,927
Provision for Bad Debt	62,179,073	61,153,134	49,017,030
Total Deductions	1,552,945,777	1,352,940,179	1,189,926,224
NET OPERATING REVENUE	628,587,587	572,106,927	538,882,665
OPERATING EXPENSES			
Salaries and Wages	226,210,720	216,440,445	208,352,621
Physicians' Salaries and Wages	46,764,821	39,500,656	33,327,871
Supplies	164,820,110	139,559,061	125,127,338
Taxes	228,252	252,680	287,252
Depreciation	25,931,840	24,490,737	22,652,789
Rent	7,412,191	6,156,839	5,388,803
Interest, Other than Capital	6,280	4,533	11,800
Management Fees			
Fees to Affiliates	0	0	0
Fees to Non-Affiliates	8,108,002	3,127,263	2,457,722
Other Expenses	131,992,484	126,080,252	119,912,049
TOTAL OPERATING EXPENSES	611,474,700	555,612,466	517,518,245
OTHER REVENUE (EXPENSES) - NET			
Contributions used for purchase of property and equipment	1,922,094	3,606,812	983,710
Investment Income	3,464,115	5,049,548	4,715,736
Change in Fair Value of Interest Rate Swap	(3,929,172)	3,995,761	2,216,165
Unrealized Gain (Losses)	2,435,254	2,909,055	(1,610,159)
TOTAL OTHER REVENUE - NET	3,892,291	15,561,176	6,305,452
NET OPERATING INCOME (LOSS)	$ 21,005,178	$ 32,055,637	$ 27,669,872
Capital Expenditures			
Retirement of Principal	10,998,099	11,339,053	11,664,838
Interest	12,270,742	12,214,135	12,139,210
Total Capital Expenditures	$ 23,268,841	$ 23,553,188	$ 23,804,048
NET OPERATING INCOME (LOSS)	21,005,178	32,055,637	27,669,872
LESS CAPITAL EXPENDITURES	23,268,841	23,553,188	23,804,048
NOI LESS CAPITAL EXPENDITURES	$ (2,263,663)	$ 8,502,449	$ 3,865,824

)THER EXPENSES	2013	2012	2011
'urchased Services	78,739,560	73,271,747	68,172,873
Graduate Medical Education Reimbursement	31,806,637	31,120,692	30,167,311
nsurance	6,644,783	6,917,679	6,863,907
Maintenance and Utility	14,033,136	13,789,116	13,278,203
)ther Expenses	768,368	981,018	1,429,755
	131,992,484	126,080,252	119,912,049

PROJECTED DATA CHART

Acute Care Beds (28)

Give information for the two (2) years following completion of this proposal. The fiscal year begins in January

		Year 1	Year 2
A.	Utilization/Occupancy Data (Inpatient Days and OBS)*	9,198	9,382
B.	Revenue from Services to Patients		
	1. Inpatient Services	$ 52,409,454	$ 53,981,738
	2. Outpatient Services (Observation patients)	$ 11,240,293	$ 11,577,502
	3. Emergency Services	$	$
	4. Other Operating Revenue (Specify) _____	$	$
	Gross Operating Revenue	**$ 63,649,747**	**$ 65,559,239**
C.	Deductions from Operating Revenue		
	1. Contractual Adjustments	$ 43,600,077	$ 45,235,875
	2. Provisions for Charity Care	$ 1,718,543	$ 1,770,099
	3. Provisions for Bad Debt	$ 1,635,798	$ 1,684,872
	Total Deductions	**$ 46,954,418**	**$ 48,690,847**
NET OPERATING REVENUE		$ 16,695,329	$ 16,868,392
D.	Operating Expenses		
	1. Salaries and Wages	$ 8,060,728	$ 8,411,857
	2. Physicians' Salaries and Wages	$ -	$ -
	3. Supplies	$ 6,747,312	$ 6,910,758
	4. Taxes	$ -	$ -
	5. Depreciation	$ 321,338	$ 321,338
	6. Rent	$ -	$ -
	7. Interest, other than Capital	$ -	$ -
	8. Management Fees:	$ -	$ -
	a. Fees to Affiliates	$ -	$ -
	b. Fees to Non-Affiliates	$ -	$ -
	9. Other Expenses	$ 1,095,437	$ 1,128,520
	Specify: _____		
	Total Operating Expenses	$ 16,224,815	$ 16,772,472
E.	Other Revenue (Expenses)--Net		
	Specify: _____		
NET OPERATING INCOME (LOSS)		$ 470,514	$ 95,920
F.	Capital Expenditures		
	1. Retirement of Principal	$ -	
	2. Interest		
	Total Capital Expenditures		$ -
NET OPERATING INCOME (LOSS)		$ 470,514	$ 95,920
LESS CAPITAL EXPENDITURES		$ -	$ -
NOI LESS CAPITAL EXPENDITURES		$ 470,514	$ 95,920

* 7,358 Inpatient days and 1,840 observation patients

PROJECTED DATA CHART

Critical Care Beds (16)

Give information for the two (2) years following completion of this proposal. The fiscal year begins in January

		Year 1	Year 2
A.	Utilization/Occupancy Data (Inpatient Days)	4,672	4,765
B.	Revenue from Services to Patients		
	1. Inpatient Services	$ 40,801,046	$ 42,025,077
	2. Outpatient Services	$ -	$ -
	3. Emergency Services	$	$
	4. Other Operating Revenue (Specify) _____	$	$
	Gross Operating Revenue	**$ 40,801,046**	**$ 42,025,077**
C.	Deductions from Operating Revenue		
	1. Contractual Adjustments	$ 28,152,722	$ 29,207,429
	2. Provisions for Charity Care	$ 1,101,628	$ 1,134,677
	3. Provisions for Bad Debt	$ 1,048,587	$ 1,080,044
	Total Deductions	**$ 30,302,937**	**$ 31,422,150**
NET OPERATING REVENUE		$ 10,498,109	$ 10,602,927
D.	Operating Expenses		
	1. Salaries and Wages	$ 4,767,281	$ 4,942,444
	2. Physicians' Salaries and Wages	$ -	$ -
	3. Supplies	$ 4,429,850	$ 4,547,325
	4. Taxes	$ -	$ -
	5. Depreciation	$ 439,843	$ 439,843
	6. Rent	$ -	$ -
	7. Interest, other than Capital	$ -	$ -
	8. Management Fees:	$ -	$ -
	a. Fees to Affiliates	$ -	$ -
	b. Fees to Non-Affiliates	$ -	$ -
	9. Other Expenses	$ 624,833	$ 643,703
	Specify: _____		
	Total Operating Expenses	$ 10,261,808	$ 10,573,315
E.	Other Revenue (Expenses)–Net		
	Specify: _____		
NET OPERATING INCOME (LOSS)		$ 236,302	$ 29,612
F.	Capital Expenditures		
	1. Retirement of Principal		
	2. Interest		
	Total Capital Expenditures		$ -
NET OPERATING INCOME (LOSS)		$ 236,302	$ 29,612
LESS CAPITAL EXPENDITURES		$ -	$ -
NOI LESS CAPITAL EXPENDITURES		$ 236,302	$ 29,612

5. Please identify the project's average gross charge, average deduction from operating revenue, and average net charge.

New Medical Surgical Beds:

Average Gross Charge per day:	$6,919.95
Average Deduction per day:	$5,104.85
Average Net Charge per day:	$1,815.10

New Critical Care Beds:

Average Gross Charge per day:	$8,733.10
Average Deduction per day:	$6,487.07
Average Net Charge per day:	$2,246.03

6. A. Please provide the current and proposed charge schedules for the proposal. Discuss any adjustment to current charges that will result from the implementation of the proposal. Additionally, describe the anticipated revenue from the proposed project and the impact on existing patient charges.

Current and proposed charges for the relevant hospital services are reflected below. The charge increases represent normal increases over an approximate two year period, and are not a direct result of this proposal.

University of Tennessee Medical Center

Current vs. Projected Relevant Charge Data

	Current Avg. Total Charge/Day	1st Year Proposed Avg. Total Charge/Day	Current Room & Board Charge/Day	1st Year Proposed Room & Board Charge/Day
NICU Level 1 & 2	6,255	6,442	4,700	4,841
NICU Level 3	6,255	6,442	5,400	5,562
Critical Care	8,733	8,733	2,694	2,694
Acute Care (Inpatient)	6,920	6,920	1,045	1,045

B. Compare the proposed charges to those of similar facilities in the service area/adjoining service areas, or to proposed charges of projects recently approved by the Health Services and Development Agency. If applicable, compare the proposed charges of the project to the current Medicare allowable fee schedule by common procedure terminology (CPT) code(s).

Comparable average charges of other providers for these specific service lines are not available to the applicant. And, since UTMC is the only academic medical center and Level I trauma center in the region, there really are no comparable hospitals in the area.

The Agency recently approved Skyline Medical Center for a relocation of med/surg and ICU beds (CN1406-020). A table comparing some selected proposed charges approved by the Agency for that project to the same DRG codes for this project are attached on the following page.

7. Discuss how projected utilization rates will be sufficient to maintain cost-effectiveness.

As reflected on the Projected Data Chart, both the med/surg and the ICU bed additions will have a positive net operating income in the first two years of operation. The margins decrease in the second year, resulting from assumed declining reimbursement rates from government payors. In any event, the Financial Statements reflect sufficient assets to ensure financial viability.

8. Discuss how financial viability will be ensured within two years; and demonstrate the availability of sufficient cash flow until financial viability is achieved.

As reflected on the Projected Data Chart, both the med/surg and the ICU bed additions will have a positive net operating income in the first two years of operation. The margins decrease in the second year, resulting from assumed declining reimbursement rates from government payors. In any event, the Financial Statements reflect sufficient assets to ensure financial viability.

9. Discuss the project's participation in state and federal revenue programs including a description of the extent to which Medicare, TennCare/Medicaid, and medically indigent patients will be served by the project. In addition, report the estimated dollar amount of revenue and percentage of total project revenue anticipated from each of TennCare, Medicare, or other state and federal sources for the proposal's first year of operation.

UTMC participates in both the Medicare and TennCare programs. UTMC contracts with all TennCare MCOs in the region. In addition, effective January 1, 2015 UTMC will be under contract with AmeriGroup Community Care.

For the whole hospital, the following was the Medicare and TennCare payor mix for the 12 months ending July 31, 2014:

UT Medical Center

Average Charge Data by MS-DRG

Jan - Jun 2014

	UT Average Gross Charge					Skyline Average Gross Charge			
	Current Average	Year 1	Year 2	UTMC Medicare with IME*		Current Average	Year 1	Year 2	Skyline Medicare
Med/Surg									
64 INTRACRANIAL HEMORRHAGE	42,221	42,221	43,066	12,739		599,199	599,199	599,199	10,509
65 INTRACRANIAL HEMORRHAGE	33,201	33,201	33,865	7,882		194,166	194,166	194,166	6,785
189 PULMONARY EDEMA & RESPIR	23,229	23,229	23,693	8,912		274,729	274,729	274,729	7,575
190 CHRONIC OBSTRUCTIVE PULM	22,721	22,721	23,175	8,564		249,883	249,883	249,883	7,308
193 SIMPLE PNEUMONIA & PLEUR	29,089	29,089	29,671	10,642		383,749	383,749	383,749	8,902
194 SIMPLE PNEUMONIA & PLEUR	20,171	20,171	20,574	7,147		251,477	251,477	251,477	6,222
392 ESOPHAGITIS, GASTROENT &	17,678	17,678	18,031	5,409		128,116	128,116	128,116	4,889
470 MAJOR JOINT REPLACEMENT	52,761	52,761	53,816	15,699		204,682	204,682	204,682	12,778
690 KIDNEY & URINARY TRACT I	15,140	15,140	15,443	5,627		163,586	163,586	163,586	5,056
871 SEPTICEMIA OR SEVERE SEP	32,526	32,526	33,176	13,551		598,422	598,422	598,422	11,132
ICU/CCU									
64 INTRACRANIAL HEMORRHAGE	56,340	56,340	57,466	12,739		571,045	571,045	571,045	10,509
65 INTRACRANIAL HEMORRHAGE	42,384	42,384	43,232	7,882		237,543	237,543	237,543	6,785
100 SEIZURES W MCC	43,044	43,044	43,905	11,107		400,258	400,258	400,258	9,258
208 RESPIRATORY SYSTEM DIAGN	57,433	57,433	58,581	16,729		327,785	327,785	327,785	13,568
247 PERC CARDIOVASC PROC W D	63,057	63,057	64,318	14,927		133,561	133,561	133,561	12,187
378 G.I. HEMORRHAGE W CC	36,756	36,756	37,491	7,336		88,979	88,979	88,979	6,366
638 DIABETES W CC	19,783	19,783	20,178	6,036		71,033	71,033	71,033	5,370
871 SEPTICEMIA OR SEVERE SEP	70,453	70,453	71,862	13,551		321,069	321,069	321,069	11,132
917 POISONING & TOXIC EFFECT	40,469	40,469	41,279	10,308		426,502	426,502	426,502	8,645
918 POISONING & TOXIC EFFECT	26,361	26,361	26,888	4,642		47,001	47,001	47,001	4,301

* Indirect Medical Education

Source: Internal Hospital records & CN1406-020

Medicare: 46%

TennCare: 13%

As applied to net revenues on the Projected Data Charts for the Med/Surg beds and the ICU beds, respectively, the estimated revenue from each program are as follows:

Program	Med/Surg	ICU
Medicare:	$7,679,851	$4,829,130
TennCare:	$2,170,393	$1,364,754

10. **Provide copies of the balance sheet and income statement from the most recent reporting period of the institution and the most recent audited financial statements with accompanying notes, if applicable. For new projects, provide financial information for the corporation, partnership, or principal parties involved with the project. Copies must be inserted at the end of the application, in the correct alpha-numeric order and labeled as Attachment C, Economic Feasibility-10.**

A copy of audited financials for University Health System, Inc. is attached as Attachment C, II, Economic Feasibility 10. The attached copy does not include the Notes (approximately 25 pages) but the same can be furnished upon request.

11. **Describe all alternatives to this project which were considered and discuss the advantages and disadvantages of each alternative including but not limited to:**

a. A discussion regarding the availability of less costly, more effective, and/or more efficient alternative methods of providing the benefits intended by the proposal. If development of such alternatives is not practicable, the applicant should justify why not; including reasons as to why they were rejected.

Over the past several years, UTMC has done all it can, short of adding additional licensed beds, to make more beds available to more patients needing them. This has consisted of moving beds from relatively lower utilized service lines to the higher used lines. It is using all beds for which there is physical space to use. In November it will open an additional 32 beds in the 4th floor of the Heart Hospital.

In addition to the above, UTMC has implemented numerous LEAN and improvement projects to decrease length of stay and increase efficiency in the management of patients. Several of these are reflected below.

LRG / Lean Projects	Year Began (first cycle of A3 / Lean Project)	Current Project (supplemental cycles)
Acute Care - HO to HI	2013	Yes
Critical Care - HO to HI (Incl. ICU Transfers)	2013	Yes
EVS - Bed Turn Around Times	2012, 2013	Yes
NFS – Meal Prep Times (for pts who can D/C after eating)	2014	
Nursing - Outpatient Bedded	2012	
Nursing - Rounding	2013	
Nursing & Case Management - Discharge by 3pm (different scopes: global, 3East)	2012,	Re-launch planned; Active initiative
Mother/Baby Discharge Timeliness	2012	
Laboratory / Phlebotomy – Timeliness / Result Turn Around	2013	

While all of these steps have had some success in maximizing current bed capacity, no realistic alternative remains but to add the beds requested.

b. The applicant should document that consideration has been given to alternatives to new construction, e.g., modernization or sharing arrangements. It should be documented that superior alternatives have been implemented to the maximum extent practicable.

Except for the space for the 28 med/surg beds on the 6th Floor of the South Pavilion, which is being renovated, there is no room in the existing structures for the needed beds and NICU expansion. There is no alternative to new construction for these improvements.

(III.) CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTH CARE

1. **List all existing health care providers (e.g., hospitals, nursing homes, home care organizations, etc.), managed care organizations, alliances, and/or networks with which the applicant currently has or plans to have contractual and/or working relationships, e.g., transfer agreements, contractual agreements for health services.**

   A list of such agreements is attached as Attachment C, III, Orderly Development 1.

2. **Describe the positive and/or negative effects of the proposal on the health care system. Please be sure to discuss any instances of duplication or competition**

arising from your proposal including a description of the effect the proposal will have on the utilization rates of existing providers in the service area of the project.

The positive effects of this proposal on the area are significant. Patients needing acute care and critical care beds at UTMC will be able to access them on a more consistent basis. Patient holds from the E.D. waiting for an inpatient bed can be greatly reduced. Seriously ill infants in the NICU and their families will have more privacy and comfort during the child's stay in the NICU. And the number of patients who have to be turned away or transferred to other facilities, contrary to their and/or their physicians wishes, can be greatly reduced.

It is difficult to see a negative impact this project will have on the system as a whole, or on any particular provider. While there are of course financial costs involved in implementing the project, UTMC has the funds in cash reserves, and there will be no direct impact on patient charges.

While some patients who are currently forced to be diverted or transferred to other hospitals will be lost to those hospitals, the benefits for the patient outweigh any impact on occupancy rates of those hospitals. The patient and/or the medical care provider, has chosen UTMC as the most appropriate hospital for that patient. It may be due to the specialized services UTMC can provide, it may be for 3rd party payor reasons, or a myriad of other reasons, those choices should be honored if the additional capacity can be added in a responsible and cost efficient manner. This proposal meets those parameters.

3. **Provide the current and/or anticipated staffing pattern for all employees providing patient care for the project. This can be reported using FTEs for these positions. Additionally, please compare the clinical staff salaries in the proposal to prevailing wage patterns in the service area as published by the Tennessee Department of Labor & Workforce Development and/or other documented sources.**

A proposed clinical staffing chart is reflected below. This staffing pattern matches that of existing bed units of equivalent bed count.

Position – Med Surg Unit	FTE	Wage	Median- D.O.L.W.D.
Manager (RN)	1.00	52.89	$25.65
Team leader (RN)	2.33	40.18	$25.65
Registered Nurse (RN)	22.23	33.29	$25.65
Certified Nursing Assistant (CNA)	11.12	16.74	$10.55
Monitor Tech (MT)	4.45	16.70	Not Listed
Total	41.13		

Position – Critical Care Unit	FTE	Wage	Median- D.O.L.W.D.
Manager (RN)	1.00	52.89	$25.65
Team leader (RN)	4.98	40.18	$25.65
Registered Nurse (RN)	38.25	33.29	$25.65
Certified Nursing Assistant (CNA)	4.78	16.74	$10.55
Total	49.01		

4. **Discuss the availability of and accessibility to human resources required by the proposal, including adequate professional staff, as per the Department of Health, the Department of Mental Health and Developmental Disabilities, and/or the Division of Mental Retardation Services licensing requirements.**

   The additional staff that will need to be hired is shown in the immediately preceding response. UTMC is experienced in hiring health care staff, and anticipates no problem in doing so. In its staffing as in all areas of operation, UTMC will maintain compliance with all licensing and accreditation requirements.

5. **Verify that the applicant has reviewed and understands all licensing certification as required by the State of Tennessee for medical/clinical staff. These include, without limitation, regulations concerning physician supervision, credentialing, admission privileges, quality assurance policies and programs, utilization review policies and programs, record keeping, and staff education.**

   The management and executive leadership of UTMC is familiar with all such requirements and is vigilant in keeping up with all revisions, additions and changing interpretations of the same. UTMC will maintain compliance with all licensing and accreditation requirements.

6. **Discuss your health care institution's participation in the training of students in the areas of medicine, nursing, social work, etc. (*e.g.*, internships, residencies, etc.).**

   UTMC has a total of 210 Residents and Fellows (physicians in advanced training seeing patients every day and fulfilling UTMC's as a teaching hospital and training the next generation of physicians). 18 of this number are in Dentistry (10 are in Oral-Maxillofacial Surgery and are essential to the trauma programs). 27 of these Residents/Fellows are supported by funding other than UTMC's Medicare funded allocations. In addition, UTMC participates in training a number of additional clinical specialties. A list of institutions with which UTMC has Educational Affiliation Agreements is attached as Attachment C, III, Orderly Development 6.

7. **(a) Please verify, as applicable, that the applicant has reviewed and understands the licensure requirements of the Department of Health, the Department of Mental Health and Developmental Disabilities, the Division of Mental Retardation Services, and/or any applicable Medicare requirements.**

   The applicant so verifies.

   (b) Provide the name of the entity from which the applicant has received or will receive licensure, certification, and/or accreditation.

   Licensure: Tennessee Board for Licensing Health Care Facilities

   Accreditation: The Joint Commission. For additional accreditations for UTMC, please see Attachment C, III, Orderly Development 7 (1).

   If an existing institution, please describe the current standing with any licensing, certifying, or accrediting agency. Provide a copy of the current license of the facility.

   UTMC is in good standing with all licensing and accreditation organizations.

   A copy of the hospital license is attached as Attachment C, III, Orderly Development 7 (2).

8. **For existing licensed providers, document that all deficiencies (if any) cited in the last licensure certification and inspection have been addressed through an approved plan of correction. Please include a copy of the most recent licensure/certification inspection with an approved plan of correction.**

   Because UTMC is accredited by the Joint commission,. It is not routinely surveyed by licensure, but is deemed in compliance by the JC accreditations. A copy of the most recent Joint Commission inspections and accreditations documents s are attached as Attachment C, III, Orderly Development, 8.

9. **Document and explain any final orders or judgments entered in any state or country by a licensing agency or court against professional licenses held by the applicant or any entities or persons with more than a 5% ownership interest in the applicant. Such information is to be provided for licenses regardless of whether such license is currently held.**

   There are none.

10. **Identify and explain any final civil or criminal judgments for fraud or theft against any person or entity with more than a 5% ownership interest in the project.**

    There are none.

11. **If the proposal is approved, please discuss whether the applicant will provide the Tennessee Health Services and Development Agency and/or the reviewing agency information concerning the number of patients treated, the number and type of procedures performed, and other data as required.**

    UTMC will do so.

PROOF OF PUBLICATION

Attach the full page of the newspaper in which the notice of intent appeared with the mast and dateline intact or submit a publication affidavit from the newspaper as proof of the publication of the letter of intent.

The Notice of Intent was published in the Knoxville News Sentinel, a newspaper of general circulation in Knox County, on September 10, 2014.

A Publisher's Affidavit is attached following this response.

DEVELOPMENT SCHEDULE

Tennessee Code Annotated § 68-11-1609(c) provides that a Certificate of Need is valid for a period not to exceed three (3) years (for hospital projects) or two (2) years (for all other projects) from the date of its issuance and after such time shall expire; provided, that the Agency may, in granting the Certificate of Need, allow longer periods of validity for Certificates of Need for good cause shown. Subsequent to granting the Certificate of Need, the Agency may extend a Certificate of Need for a period upon application and good cause shown, accompanied by a non-refundable reasonable filing fee, as prescribed by rule. A Certificate of Need which has been extended shall expire at the end of the extended time period. The decision whether to grant such an extension is within the sole discretion of the Agency, and is not subject to review, reconsideration, or appeal.

1. **Please complete the Project Completion Forecast Chart on the next page. If the project will be completed in multiple phases, please identify the anticipated completion date for each phase.**

   A complete Project Completion Forecast Chart is attached following the Publisher's Affidavit.

2. **If the response to the preceding question *indicates that the applicant does not anticipate completing the project within the period of validity as defined in the preceding paragraph,* please state below any request for an extended schedule and document the "good cause" for such an extension.**

   N/A.

To: UT MEDICAL CENTER

(Advertising) NOTIFICATIONOFINTENTTOAPP **(Ref No:** 461168)

PUBLISHER'S AFFIDAVIT

State of Tennessee }
s.s
County of Knox }

Before me, the undersigned, a Notary Public in and for said county, this day pers
first duly sworn, according to law, says that he/she is a duly authorized represent
News-Sentinel, a daily newspaper published at Knoxville, in said county and sta
advertisement of :

(The Above-Referenced)

of which the annexed is a copy, was published in said paper on the following da

September 10, 2014

NOTIFICATION OF INTENT TO APPLY FOR A CERTIFICATE OF NEED

This is to provide official notice to the Health Services and Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 et seq., and the Rules of the Health Services and Development Agency, that The University of Tennessee Medical Center (UTMC), owned and managed by University Health System, Inc., a Tennessee not-for-profit corporation, intends to file an application for a Certificate of Need for: (1) the expansion and renovation of its Neonatal Intensive Care Unit (NICU) consisting of approximately 9,758 square feet of new construction and 15,432 square feet of renovated space; (2) the addition of approximately 16,850 square feet of new space and renovation of approximately 1,262 square feet of existing space, which will house a new addition to the Intensive Care Unit (ICU); (3) the renovation of approximately 12,000 square feet of existing space to convert it from non-inpatient care space to inpatient rooms; and (4) the addition of 44 acute care beds to its license. Of the 44 requested beds, 28 are anticipated to be allocated as general medical surgical beds, and 16 as ICU beds. UTMC is located at 1924 Alcoa Highway, Knoxville, Knox County, Tennessee, and is licensed as a general acute care hospital by the Tennessee Board for Licensing Health Care Facilities. No changes in services or major medical equipment are involved in this project. The estimated project cost is not to exceed $27,000,000.00.

The anticipated date of filing the application is September 15, 2014.

The contact person for this project is Jerry W. Taylor, Attorney, who may be reached at: Stites and Harbison, PLLC, SunTrust Plaza Suite 800, 401 Commerce Street, Nashville, Tennessee, 37219, 615-782-2228.

Upon written request by interested parties, a local Fact-Finding public hearing shall be conducted. Written requests for hearing should be sent to:

Health Services and Development Agency
Andrew Jackson Building, Ninth Floor
502 Deaderick Street
Nashville, TN 37243

Pursuant to T.C.A. § 68-11-1607(c)(1): (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

and that the statement of account herewith is correct to the best of his/her knowledge, information, and belief.

Susan Ogley

Subscribed and sworn to before me this 10th day of September 2014

Rebecca D Spaun
Notary Public

My commission expires November 2014

REBECCA D. SPAUN
STATE OF TENNESSEE
NOTARY PUBLIC

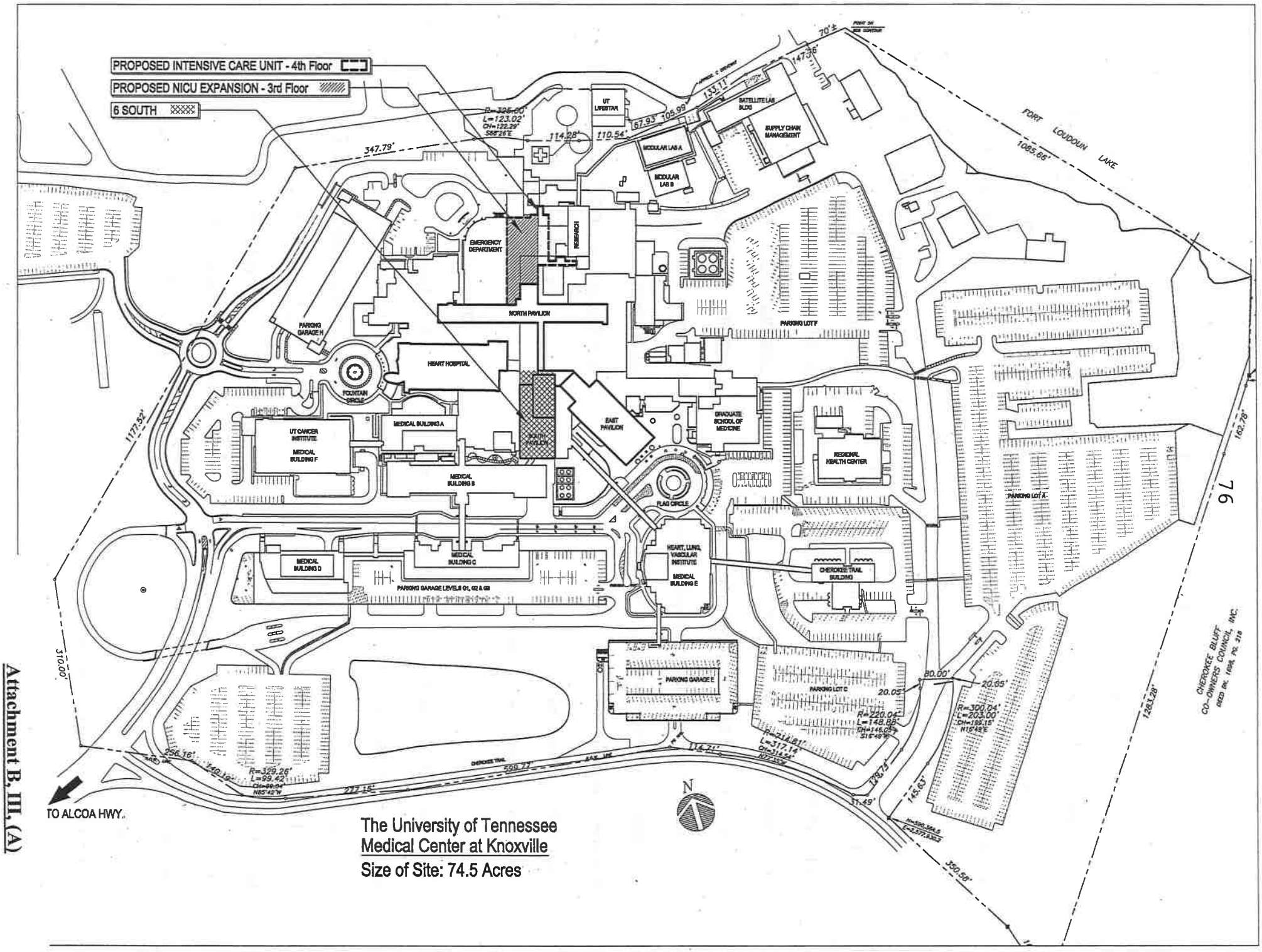
PROJECT COMPLETION FORECAST CHART

Enter the Agency projected Initial Decision date, as published in Rule 68-11-1609(c):
December 2014

Assuming the CON approval becomes the final agency action on that date; indicate the number of days **from the above agency decision date** to each phase of the completion forecast.

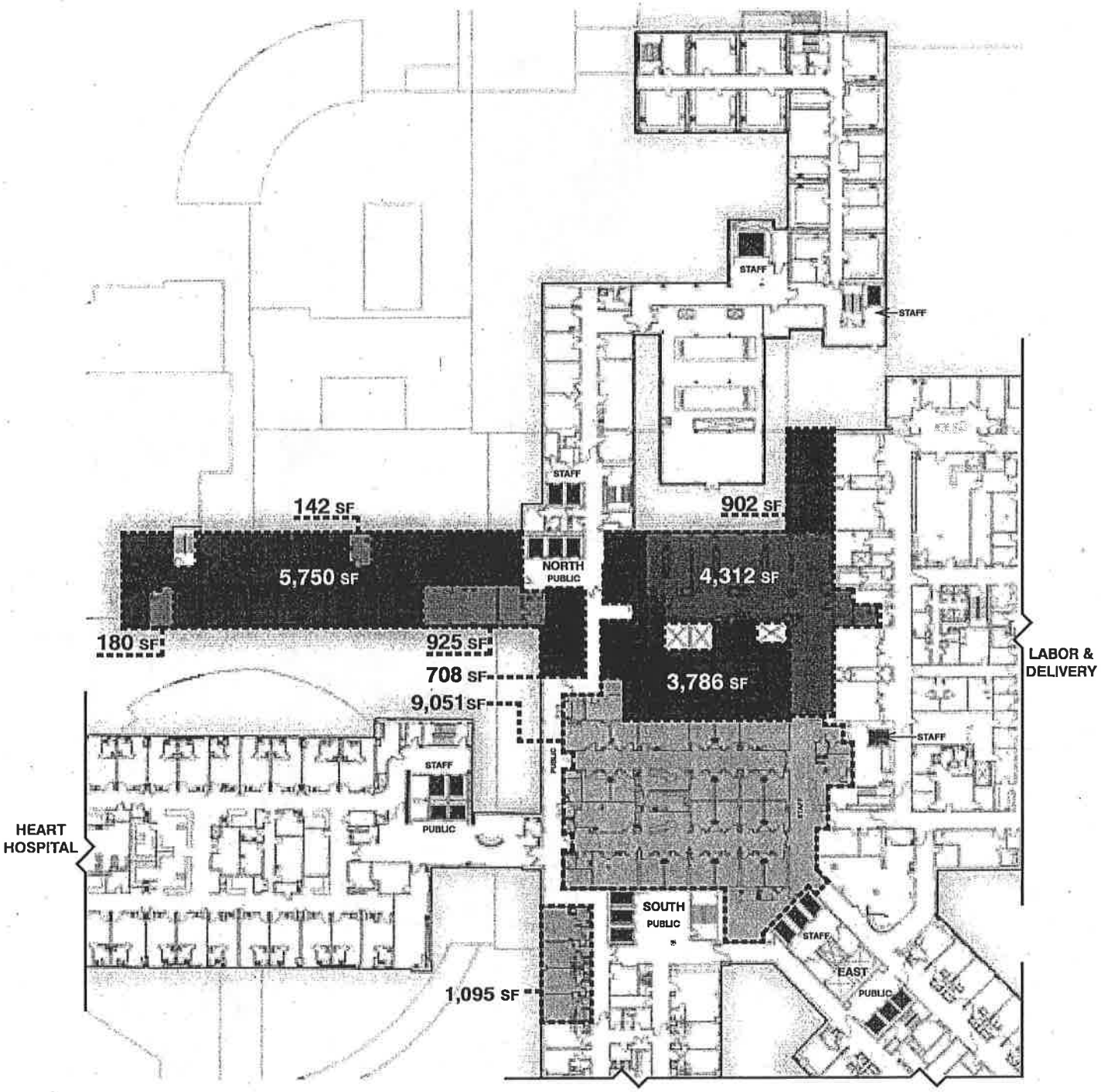
PHASE	DAYS REQUIRED	ANTICIPATED DATE (Month/Year)
1. Architectural and engineering contract signed	45	February 2015
2. Construction documents approved by the Tennessee Department of Health	180	June 2015
3. Construction contract signed	180	June 2015
4. Building permit secured	180	June 2015
5. Site preparation completed	NA	N/A
6. Building construction commenced	210	July 2015
7. Construction 40% complete	364	December 2015
8. Construction 80% complete	728	December 2016
9. Construction 100% complete (approved for occupancy	910	June 2017
10. *Issuance of license	940	July 2017
11. *Initiation of service	940	July 2017
12. Final Architectural Certification of Payment	940	July 2017
13. Final Project Report Form (HF0055)	970	August 2017

LIST OF ATTACHMENTS



The University of Tennessee
Medical Center at Knoxville
Size of Site: 74.5 Acres

Attachment B, III, (A)



04SEP2014

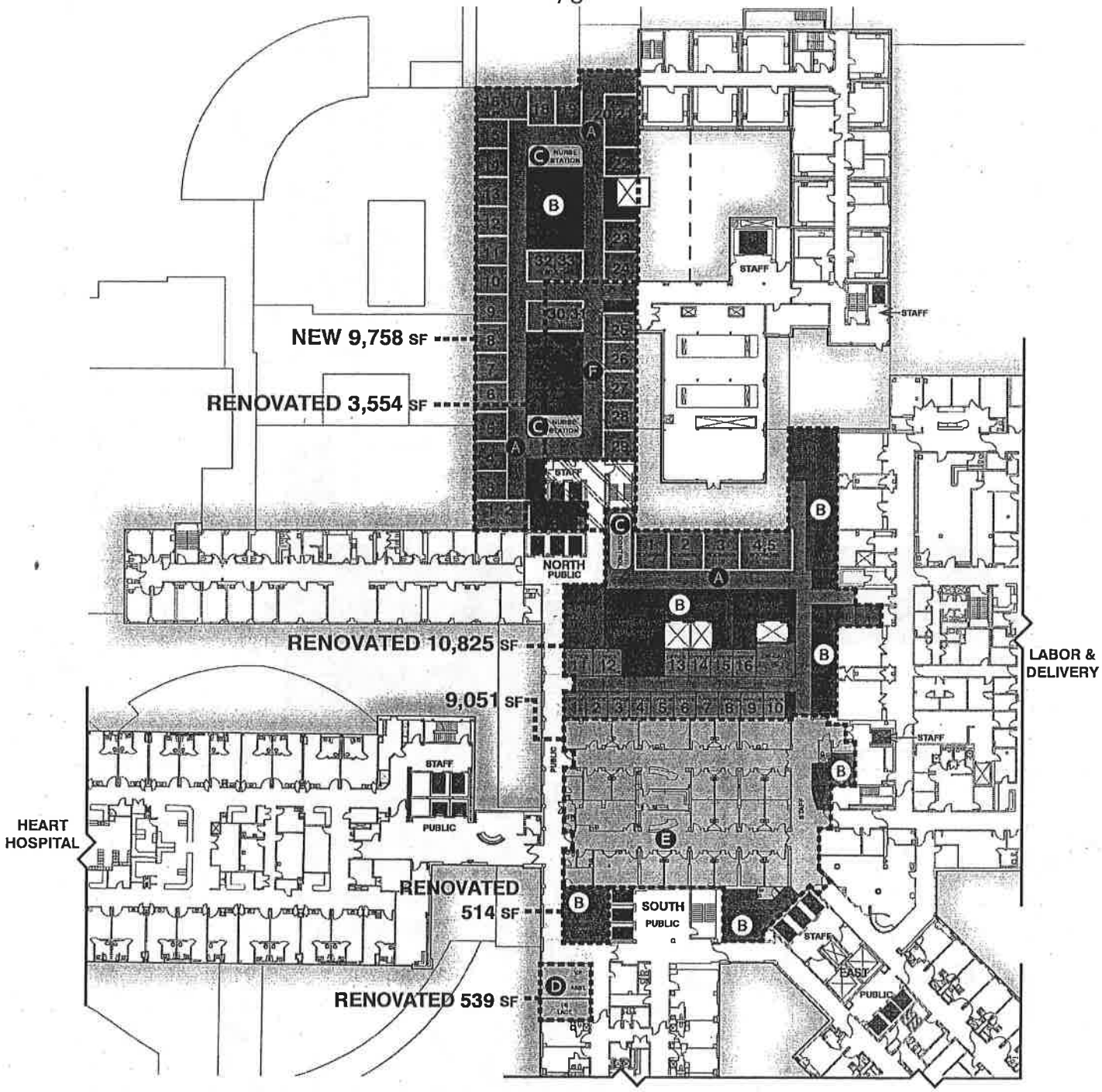
3RD FLOOR PLAN - EXISTING NICU
UT MEDICAL CENTER - 3RD & 4TH FLOOR EXPANSION
UNIVERSITY HEALTH SYSTEM

0

BARBERMcMURRY

132000

Attachment B, IV



A INFANT AREA/ROOMS
B SUPPORT
C NURSE STATION
D RELOCATED NON-NICU
E EXISTING NICU PHASE I
F RENOVATED AREA

08SEP2014

3 3RD FLOOR PLAN - NICU PHASE II
UT MEDICAL CENTER - 3RD & 4TH FLOOR EXPANSION
UNIVERSITY HEALTH SYSTEM

0 16 32 64

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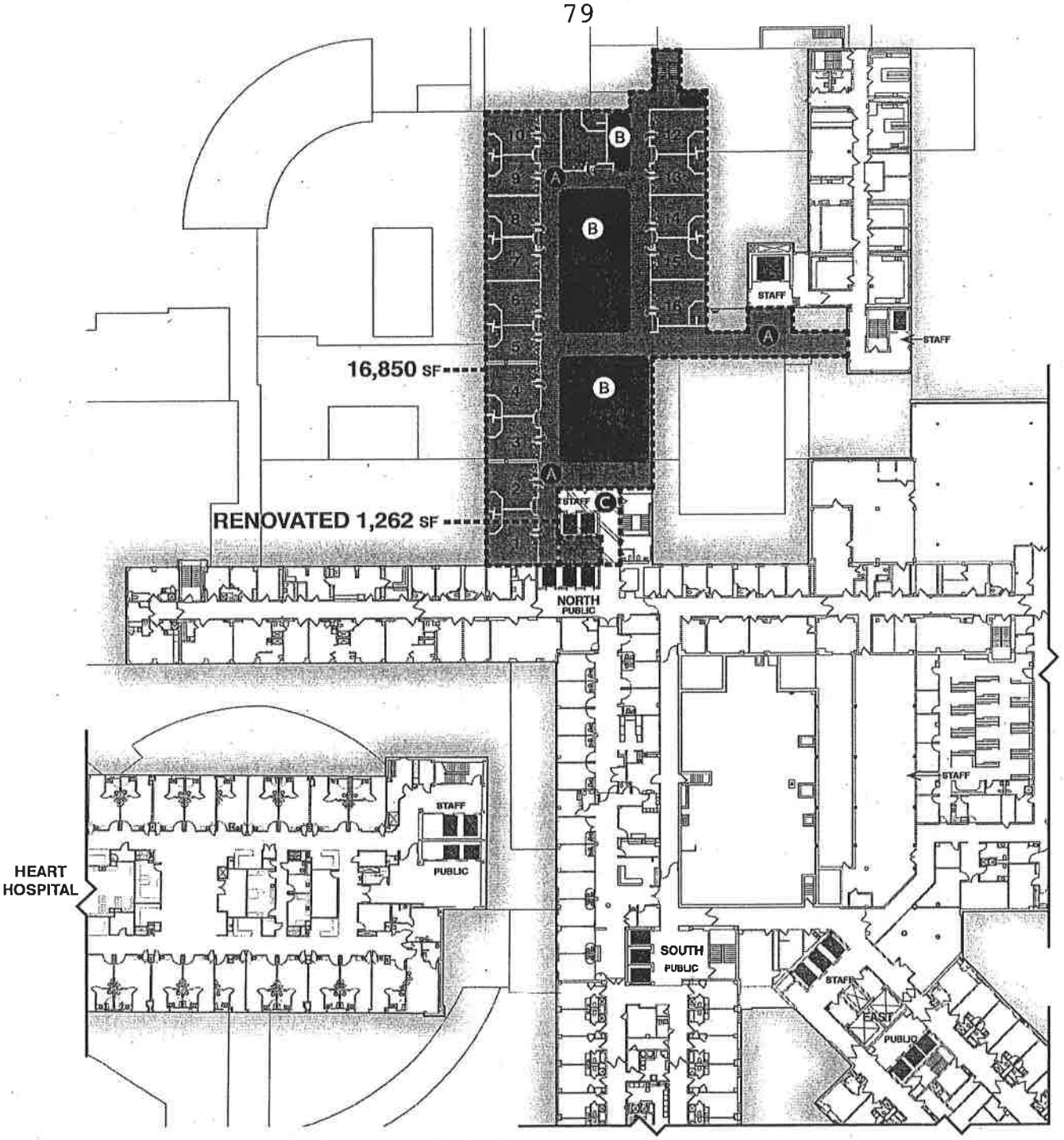
architects since 1915

132000



A PATIENT AREAS
B SUPPORT
C RENOVATED AREA

08SEP2014

4 4TH FLOOR PLAN - INTENSIVE CARE UNIT

UT MEDICAL CENTER - 3RD & 4TH FLOOR EXPANSION
UNIVERSITY HEALTH SYSTEM

0 16 32 64

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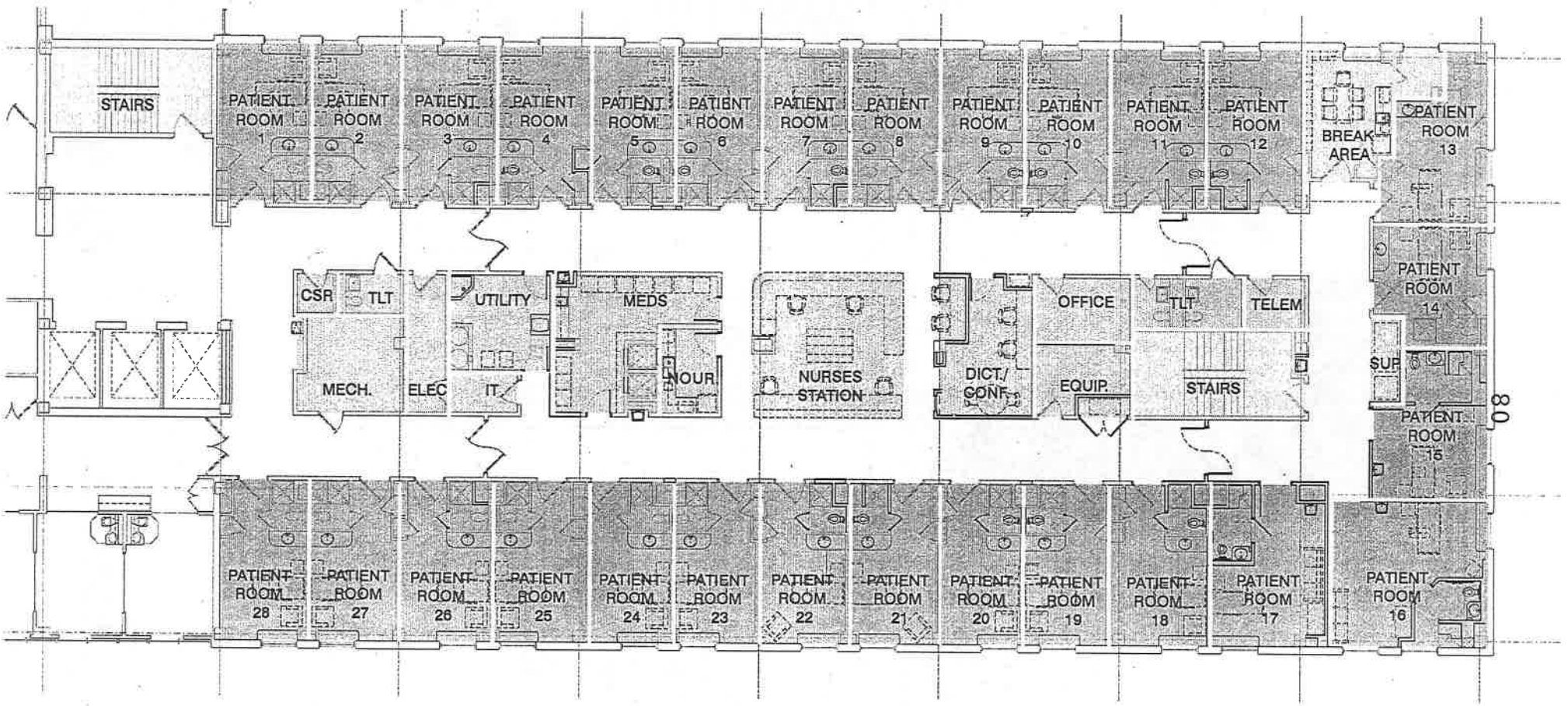


TOTAL PATIENT ROOMS: 28
PATIENT ROOMS 15,16, AND 17 ARE ALLOCATED WHEELCHAIR ACCESSIBLE

10SEP2014

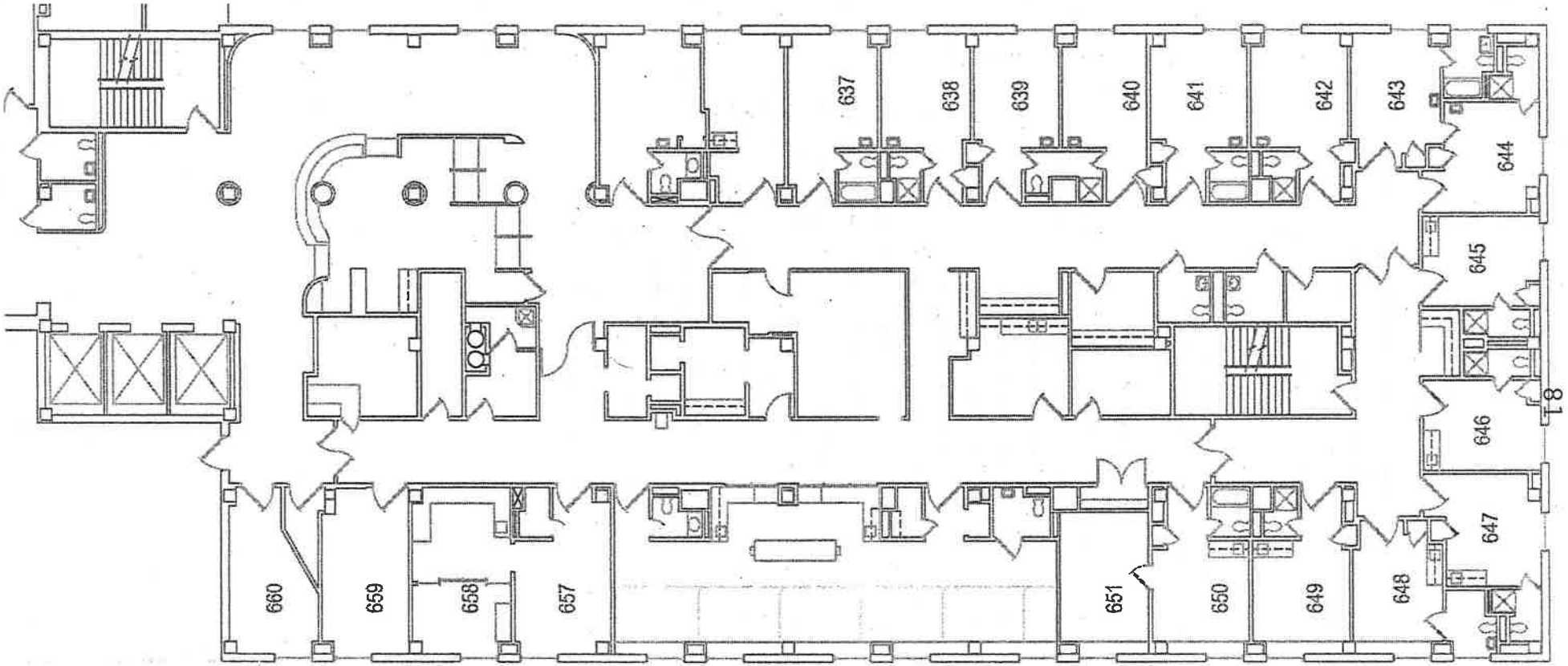
6 SOUTH PROPOSED

UT MEDICAL CENTER
UNIVERSITY HEALTH SYSTEMS

0 8 16 32

BARBERMcMURRY architects since 1915

144200



10SEP2014

6 SOUTH EXISTING OUTPATIENT CLINIC

UT MEDICAL CENTER
UNIVERSITY HEALTH SYSTEMS

0 8 16 32

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AWARDS	Agency	Date
ACTION Registry - GWTG Platinum Performance	NCDR (National Cardiovascular Data Registry)	2013
Beacon Award for Excellence MCC - Silver	American Association of Critical-Care Nurses	2013-2016
2013 Beacon Award for Excellence	American Association of Critical Care Nurses	2013
Best in Region, Surgical Cardiac Services	Healthgrades	
Best Hospitals National (top 50) Gynecology &	US News & World Report	2012-2013
Best Regional Hospitals - Cancer, Cardiology & Heart	US News & World Report	2012-2013
Best Regional Hospital - Orthopaedics	US News & World Report	2014
Breast Imaging Center of Excellence	American College of Radiology	
Certificate of Distinction for Advanced Certification as	Joint Commission	
Advanced Certification as a Comprehensive Stroke Center	Joint Commission	2013
Consumer Choice Award	National Research Corp.	2001-2013
Excellence in Quality Reporting	Care Science	2006
Exemplar Hospital - ProjectJOINTS - University Joint	Institute for Healthcare Improvement (IHI)	Sep-11
Fit Friendly Gold Worksite Wellness	American Heart Association	2010-2014
Get with the Guidelines Heart Failure Gold	American Heart Association	2011
Get with the Guidelines Heart Failure Gold Plus	American Heart Association	2012-2013
Get with the Guidelines Heart Failure Silver	American Heart Association	2010
Get with the Guidelines Heart Failure -High Level of	American Heart Association	2010
Get with the Guidelines Stroke Bronze	American Heart Association/American Stroke Assoc.	2008
Get with the Guidelines Stroke Gold	American Heart Association/American Stroke Assoc.	2010
Get with the Guidelines Stroke Gold Plus	American Heart Association/American Stroke Assoc.	2011-2012
Get with the Guidelines Stroke Gold Plus and Target Stroke	American Heart Association/American Stroke Assoc.	2013
Get with the Guidelines Stroke Gold Plus and Target Strokes	American Heart Association/American Stroke Assoc.	2014
Get with the Guidelines Stroke Silver	American Heart Association/American Stroke Assoc.	2009
Magnet Designation	American Nurses Credentialing Center	2011 - 2015
Outstanding Patient Experience Award	Healthgrades	2012-2013
STEMI	American Heart Association	
THA Health Information N Data	Blue Cross Blue Shield	2014
TNCPE Achievement Award - Level 3	TNCPE	2012

ACUTE-CARE BED NEED PROJECTIONS FOR 2014 AND 2018, BASED ON FINAL 2012 HOSPITAL JARS

COUNTY	2012		CURRENT	SERVICE AREA POPULATION			PROJECTED		PROJECTED		2012 ACTUAL BEDS		SHORTAGE/SURPLUS	
	INPATIENT DAYS	ADC	NEED	2012	2014	2018	ADC-2014	NEED 2014	ADC-2018	NEED 2018	LICENSED	STAFFED	LICENSED	STAFFED
Anderson	47,731	131	164	94,639	95,470	97,048	132	165	134	168	301	255	-133	-87
Blount	51,235	140	176	97,454	99,770	104,941	144	180	151	189	304	238	-115	-49
Campbell	18,681	51	68	21,557	21,827	22,326	52	69	53	70	120	97	-50	-27
Claiborne	7,878	22	32	12,643	12,753	13,009	22	33	22	33	85	39	-52	-6
Cocke	7,541	21	31	16,066	16,425	17,225	21	32	22	33	74	36	-41	-3
Cumberland	21,801	60	78	45,561	46,213	48,038	61	79	63	81	189	123	-108	-42
Fentress	0	0	0	.	.	.	.	.	.	.	85	54	.	.
Grainger	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hamblen	39,464	108	135	76,894	77,909	80,095	110	137	113	141	302	212	-161	-71
Hancock	1,229	3	8	1,661	1,655	1,652	3	8	3	8	10	10	-2	-2
Hawkins	3,542	10	17	10,354	10,441	10,555	10	17	10	17	50	46	-33	-29
Jefferson	8,533	23	35	17,351	17,752	18,648	24	35	25	37	58	58	-21	-21
Knox	442,861	1,213	1,517	781,145	797,585	831,502	1,239	1,549	1,292	1,614	1,877	1,777	-263	-163
Loudon	6,123	17	26	12,093	12,365	12,912	17	27	18	28	50	30	-22	-2
McMinn	15,973	44	59	32,166	32,503	33,184	44	60	45	61	190	111	-129	-50
Monroe	10,213	28	40	18,562	18,905	19,665	29	41	30	42	59	59	-17	-17
Morgan	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Roane	6,593	18	28	13,068	13,113	13,243	18	28	18	28	105	36	-77	-8
Scott	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sevier	13,019	36	50	37,258	38,189	40,405	37	51	39	53	79	69	-26	-16
Union	.	.	.	.	.	.	.	.	.	.	.	.	.	-3
Total	702,417	1,925	2,464	1,288,472	1,312,875	1,267,400	1,963	2,511	2,038	2,603	3,853	3,196	-1,250	-593

Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics. 11/14/2013

ata from Final JAR-Hospitals Schedules F and G. Underlying Tennessee population estimates and projections (2013 Series) from Office of Health Statistics. Projections and estimates for other states obtained from those states.

Attachment C, I, Need,1, (1)

ACUTE-CARE BED NEED PROJECTIONS FOR 2014 AND 2018, BASED ON FINAL 2012 HOSPITAL JARS

COUNTY	2012		CURRENT	SERVICE AREA POPULATION			PROJECTED		PROJECTED		2012 ACTUAL BEDS		SHORTAGE/SURPLUS	
	INPATIENT DAYS	ADC	NEED	2012	2014	2018	ADC-2014	NEED 2014	ADC-2018	NEED 2018	LICENSED	STAFFED	LICENSED	STAFFED
Anderson	47,731	131	164	94,639	95,470	97,048	132	165	134	168	301	255	-133	-87
Beford	7,281	20	30	17,853	18,323	19,505	20	31	22	33	60	60	-27	-27
Benton	1,959	5	11	2,278	2,264	2,243	5	11	5	11	25	12	-14	-1
Bledsoe	2,984	8	15	2,088	2,078	2,085	8	15	8	15	25	25	-10	-10
Blount	51,235	140	176	97,454	99,770	104,941	144	180	151	189	304	238	-115	-49
Bradley	38,232	105	131	82,623	84,112	87,052	107	133	110	138	351	207	-213	-69
Campbell	18,681	51	68	21,557	21,827	22,326	52	69	53	70	120	97	-50	-27
Cannon	6,638	18	28	3,813	3,874	3,969	18	29	19	29	60	50	-31	-21
Carroll	6,718	18	28	14,137	14,118	14,111	18	28	18	28	115	68	-87	-40
Carter	15,622	43	58	29,978	30,095	30,448	43	58	43	59	121	79	-62	-20
Cheatham	1,549	4	9	1,364	1,381	1,413	4	9	4	9	12	12	-3	-3
Chester	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Claiborne	7,878	22	32	12,643	12,753	13,009	22	33	22	33	85	39	-52	-6
Clay	5,592	15	24	5,364	5,343	5,345	15	24	15	24	36	34	-12	-10
Cocke	7,541	21	31	16,066	16,425	17,225	21	32	22	33	74	36	-41	-3
Coffee	31,305	86	107	56,704	57,545	59,957	87	109	91	113	214	159	-101	-46
Crockett	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cumberland	21,801	60	78	45,561	46,213	48,038	61	79	63	81	189	123	-108	-42
Davidson	763,385	2,092	2,614	1,451,264	1,488,518	1,562,068	2,145	2,681	2,251	2,814	3,754	3,129	-940	-315
Decatur	3,411	9	16	5,011	5,052	5,157	9	17	10	17	40	27	-23	-10
DeKalb	4,110	11	19	7,665	7,707	7,805	11	19	12	19	71	56	-52	-37
Dickson	18,017	49	66	33,604	33,850	34,413	50	66	51	67	157	120	-90	-53
Dyer	12,937	35	49	33,319	33,224	33,183	35	49	35	49	225	120	-176	-71
Fayette	714	2	5	2,325	2,406	2,603	2	5	2	6	46	10	-40	-4
Fentress	0	0	0	.	.	.	.	.	.	.	85	54	.	.
Franklin	22,404	61	80	33,182	33,338	33,983	62	80	63	81	152	110	-71	-29
Gibson	5,069	14	23	7,947	8,051	8,206	14	23	14	23	209	90	-186	-67
Giles	9,124	25	37	12,333	12,327	12,331	25	37	25	37	95	81	-58	-44
Grainger	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Greene	27,601	76	96	50,076	50,565	51,689	76	97	78	99	240	170	-141	-71
Grundy	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hamblen	39,464	108	135	76,894	77,909	80,095	110	137	113	141	302	212	-161	-71
Hamilton	392,786	1,076	1,345	696,028	710,184	736,123	1,098	1,372	1,138	1,423	1,551	1,235	-128	188
Hancock	1,229	3	8	1,661	1,655	1,652	3	8	3	8	10	10	-2	-2
Hardeman	815	2	6	2,537	2,508	2,480	2	6	2	6	51	23	-45	-17
Hardin	7,103	20	30	14,725	14,795	14,963	20	30	20	30	58	49	-28	-19
Hawkins	3,542	10	17	10,354	10,441	10,555	10	17	10	17	50	46	-33	-29
Haywood	1,617	4	9	3,872	3,831	3,811	4	9	4	9	62	36	-53	-27
Henderson	2,444	7	13	6,143	6,182	6,284	7	13	7	13	45	45	-32	-32
Henry	16,775	46	62	28,422	28,546	28,712	46	62	46	62	142	101	-80	-39
Hickman	492	1	4	1,425	1,427	1,444	1	4	1	4	15	15	-11	-11
Houston	2,870	8	14	4,017	4,052	4,109	8	15	8	15	25	25	-10	-10
Humphreys	1,697	5	10	3,463	3,466	3,477	5	10	5	10	25	25	-15	-15

ACUTE-CARE BED NEED PROJECTIONS FOR 2014 AND 2018, BASED ON FINAL 2012 HOSPITAL JARS

COUNTY	2012		CURRENT	SERVICE AREA POPULATION			PROJECTED		PROJECTED		2012 ACTUAL BEDS		SHORTAGE/SURPLUS	
	INPATIENT DAYS	ADC	NEED	2012	2014	2018	ADC-2014	NEED 2014	ADC-2018	NEED 2018	LICENSED	STAFFED	LICENSED	STAFFED
Jackson	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Jefferson	8,533	23	35	17,351	17,752	18,648	24	35	25	37	58	58	-21	-21
Johnson	51	0	1	233	232	232	0	1	0	1	2	2	-1	-1
Knox	442,861	1,213	1,517	781,145	797,585	831,502	1,239	1,549	1,292	1,614	1,877	1,777	-263	-163
Lake	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lauderdale	3,044	8	15	4,293	4,252	4,218	8	15	8	15	25	25	-10	-10
Lawrence	9,298	26	37	18,503	18,540	18,545	26	37	26	37	99	80	-62	-43
Lewis	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lincoln	7,435	20	31	17,852	18,159	18,898	21	31	22	32	59	59	-27	-27
Loudon	6,123	17	26	12,093	12,365	12,912	17	27	18	28	50	30	-22	-2
McMinn	15,973	44	59	32,166	32,503	33,184	44	60	45	61	190	111	-129	-50
McNairy	4,953	14	22	11,089	11,200	11,451	14	22	14	23	45	45	-22	-22
Macon	3,793	10	18	5,934	6,057	6,301	11	18	11	19	25	25	-6	-6
Madison	179,979	493	616	281,828	283,339	286,657	496	620	502	627	787	729	-160	-102
Marion	14,492	40	54	9,647	9,762	9,980	40	55	41	56	70	63	-14	-7
Marshall	675	2	5	1,895	1,911	1,956	2	5	2	5	25	12	-20	-7
Maury	42,096	115	144	102,509	102,974	104,036	116	145	117	146	255	215	-109	-69
Meigs	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Monroe	10,213	28	40	18,562	18,905	19,665	29	41	30	42	59	59	-17	-17
Montgomery	43,692	120	150	126,007	130,796	139,341	124	155	132	165	270	220	-105	-55
Moore	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Morgan	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Obion	10,628	29	42	20,715	20,637	20,560	29	42	29	41	173	85	-132	-44
Overton	16,555	45	61	21,794	22,030	22,558	46	62	47	63	114	82	-51	-19
Perry	6,000	16	26	5,114	5,146	5,192	17	26	17	26	53	25	-27	1
Pickett	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Polk	0	0	0	.	.	.	.	.	.	.	25	25	.	.
Putnam	61,949	170	212	105,866	108,424	113,926	174	217	183	228	247	243	-19	-15
Rhea	3,533	10	17	7,701	7,893	8,211	10	17	10	18	25	25	-7	-7
Roane	6,593	18	28	13,068	13,113	13,243	18	28	18	28	105	36	-77	-8
Robertson	16,379	45	61	28,555	29,416	31,016	46	62	49	65	109	66	-44	-1
Rutherford	80,182	220	275	229,262	241,520	267,897	231	289	257	321	387	369	-66	-48
Scott	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sequatchie	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sevier	13,019	36	50	37,258	38,189	40,405	37	51	39	53	79	69	-26	-16
Shelby	934,049	2,559	3,199	1,416,974	1,430,639	1,457,026	2,584	3,230	2,631	3,289	4,177	3,115	-888	174
Smith	10,604	29	42	13,707	13,945	14,448	30	42	31	44	98	85	-54	-41
Stewart	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sullivan	242,753	665	831	417,761	423,735	435,560	675	843	693	867	1,056	769	-189	98
Sumner	48,799	134	167	115,476	119,215	126,486	138	173	146	183	303	213	-120	-30
Tipton	4,341	12	20	12,974	13,252	13,875	12	20	13	21	100	44	-79	-23
Trousdale	1,678	5	10	2,060	2,117	2,220	5	10	5	10	25	21	-15	-11
Unicoi	4,283	12	20	6,172	6,198	6,244	12	20	12	20	48	7	-28	13

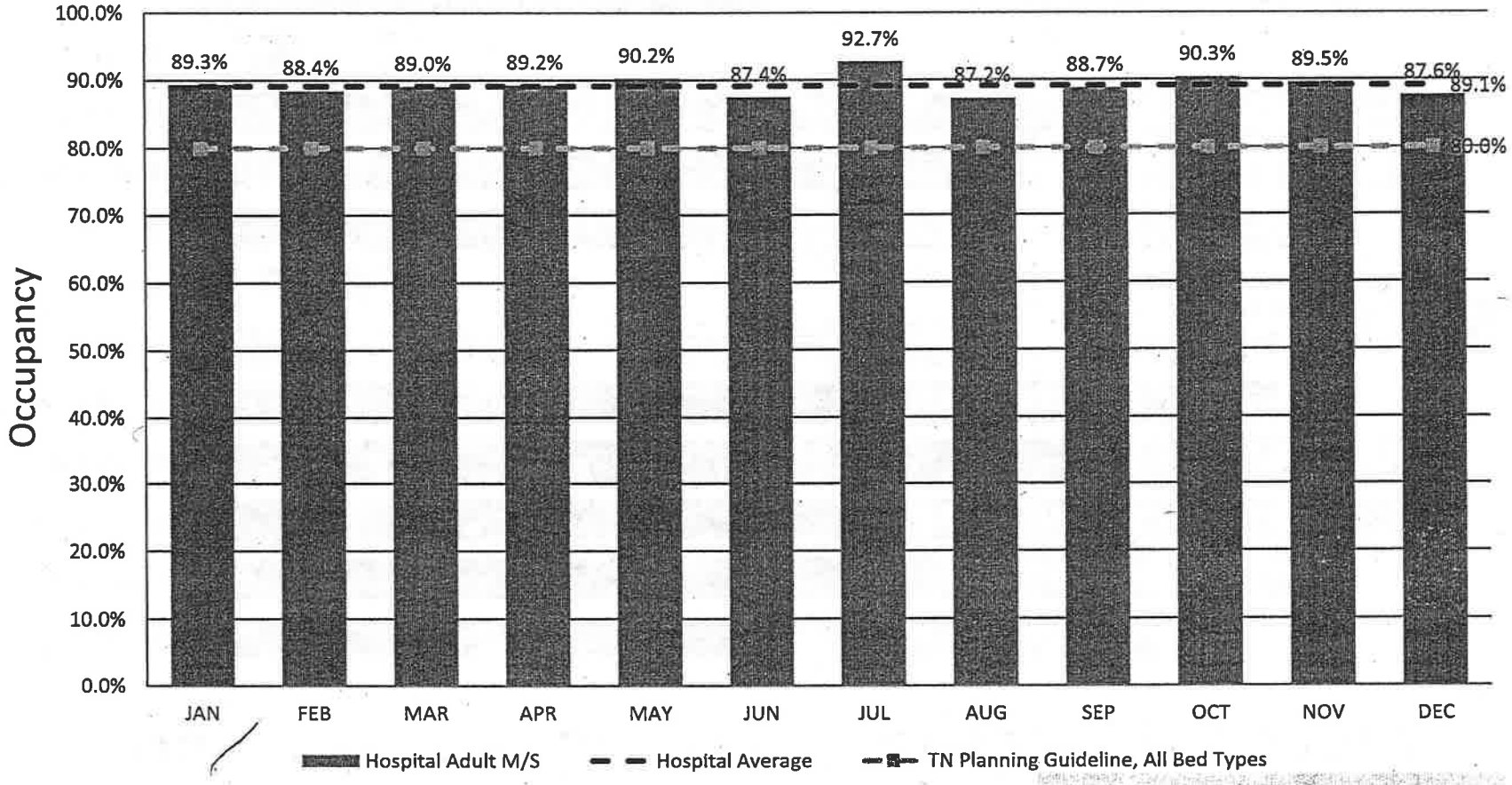
ACUTE-CARE BED NEED PROJECTIONS FOR 2014 AND 2018, BASED ON FINAL 2012 HOSPITAL JARS

COUNTY	2012		CURRENT	SERVICE AREA POPULATION			PROJECTED		PROJECTED		2012 ACTUAL BEDS		SHORTAGE/SURPLUS	
	INPATIENT DAYS	ADC	NEED	2012	2014	2018	ADC-2014	NEED 2014	ADC-2018	NEED 2018	LICENSED	STAFFED	LICENSED	STAFFED
Union	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Van Buren	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Warren	11,619	32	45	21,743	21,931	22,287	32	45	33	46	125	48	-79	-2
Washington	167,908	460	575	202,955	206,820	214,435	469	586	486	608	581	581	27	27
Wayne	1,990	6	11	4,701	4,683	4,647	5	11	5	11	80	32	-69	-21
Weakley	6,398	18	27	17,299	17,478	17,808	18	27	18	28	100	65	-72	-37
White	7,122	20	30	10,543	10,722	11,141	20	30	21	31	60	44	-29	-13
Williamson	31,464	86	108	99,271	103,289	111,805	90	112	97	121	185	185	-64	-64
Wilson	34,781	95	119	56,265	58,335	62,267	99	124	105	132	245	245	-113	-113

Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics. 11/14/2013

Data from Final JAR-Hospitals Schedules F and G. Underlying Tennessee population estimates and projections (2013 Series) from Office of Health Statistics. Projections and estimates for other states obtained from those states.

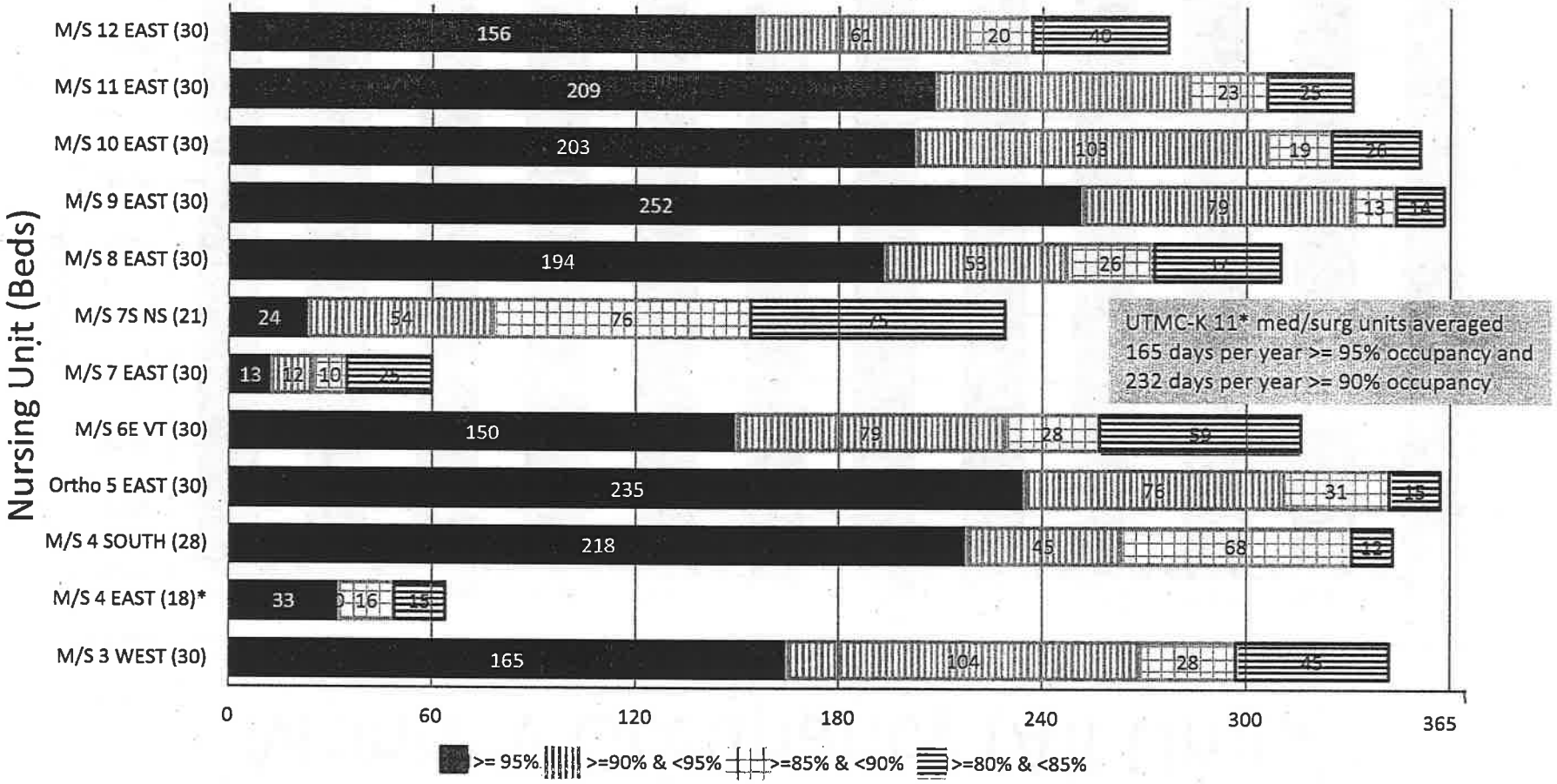
2013 UTMC-K Med/Surg All Adult Monthly Occupancy (All Units)



Note: Excludes OB, Peds, PICU, and NICU
Includes Observation Patients
Source: Internal Records

UTMC-K experiences very little monthly variation in its extremely high occupancy

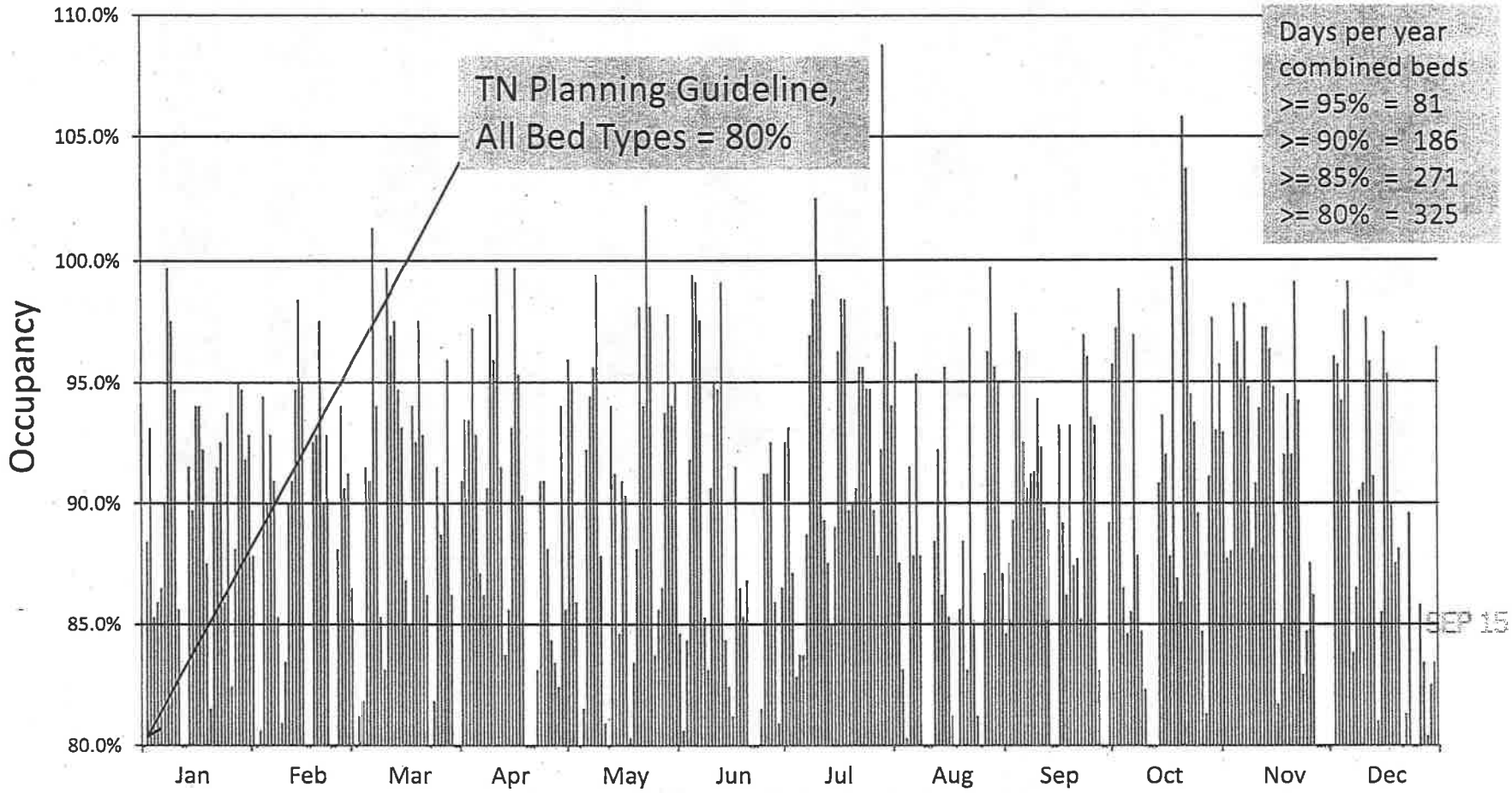
2013 UTMC-K Adult Med/Surg
Days per Year Greater Than 80% Occupancy



UTMC-K 11* med/surg units averaged
165 days per year >= 95% occupancy and
232 days per year >= 90% occupancy

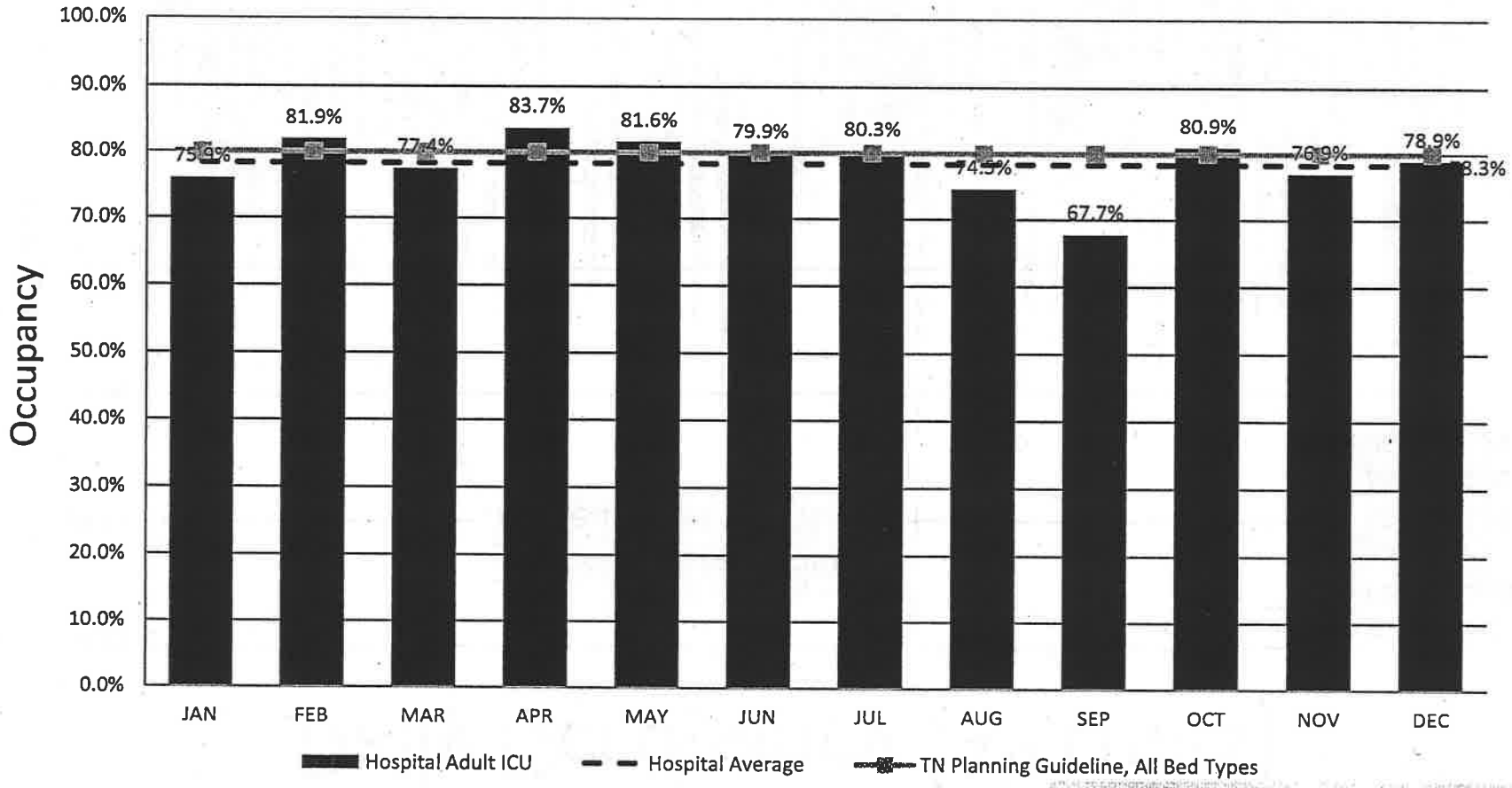
*Unit closed Jan – Aug, excluded from summary comments
Note: Excludes OB, Peds, PICU, and NICU
Includes Observation Patients
Source: Internal Records

2013 UTMC-K Med/Surg All Adult Daily Occupancy (All Units)



Note: Excludes OB, Peds, PICU, and NICU
Includes Observation Patients
Source: Internal Records

2013 UTMC-K Critical Care All Adult Monthly Occupancy (All Units)

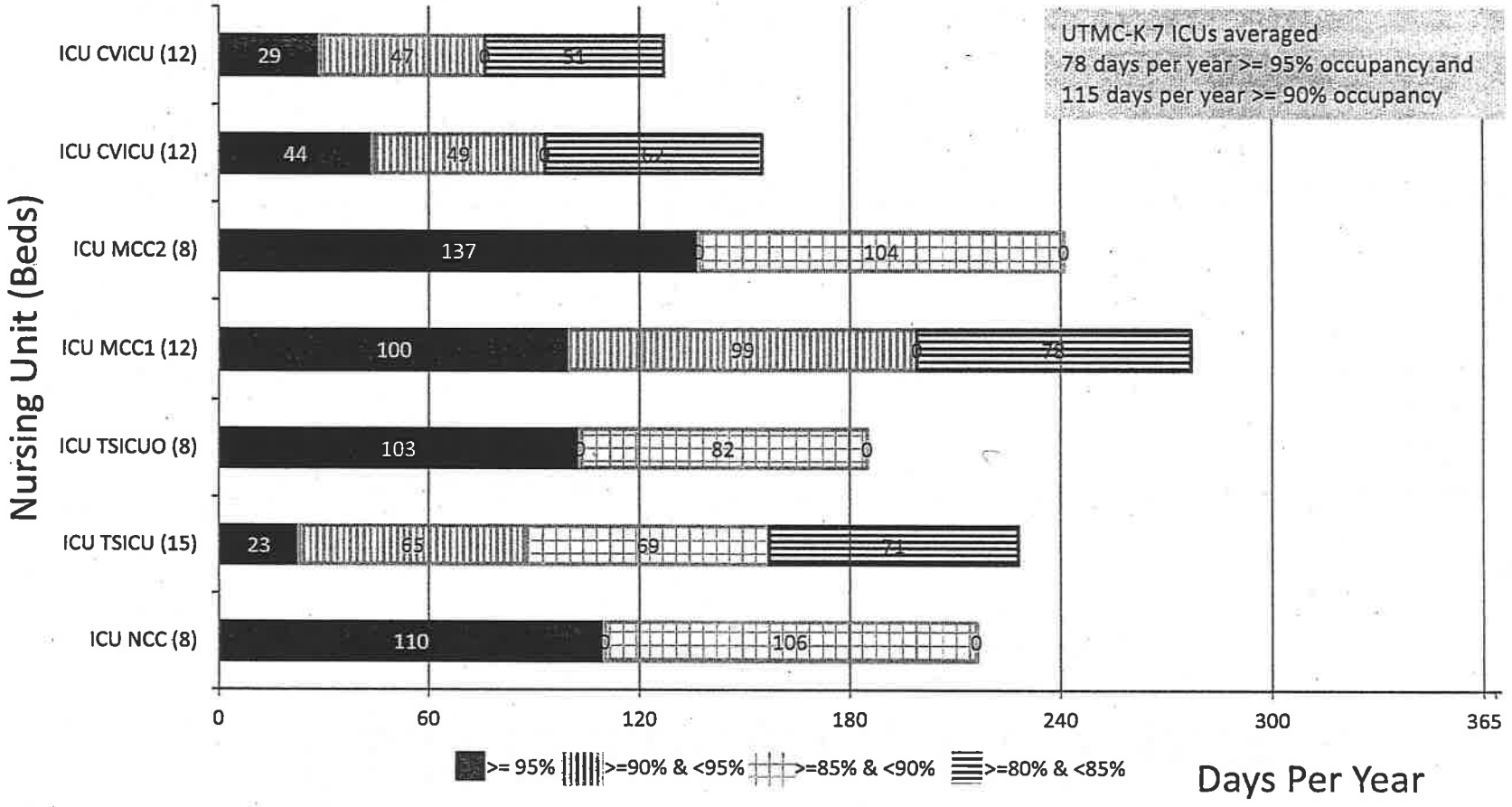


Note: Excludes OB, Peds, PICU, and NICU
Source: Internal Records

UTMC-K experiences very little monthly variation in its extremely high occupancy

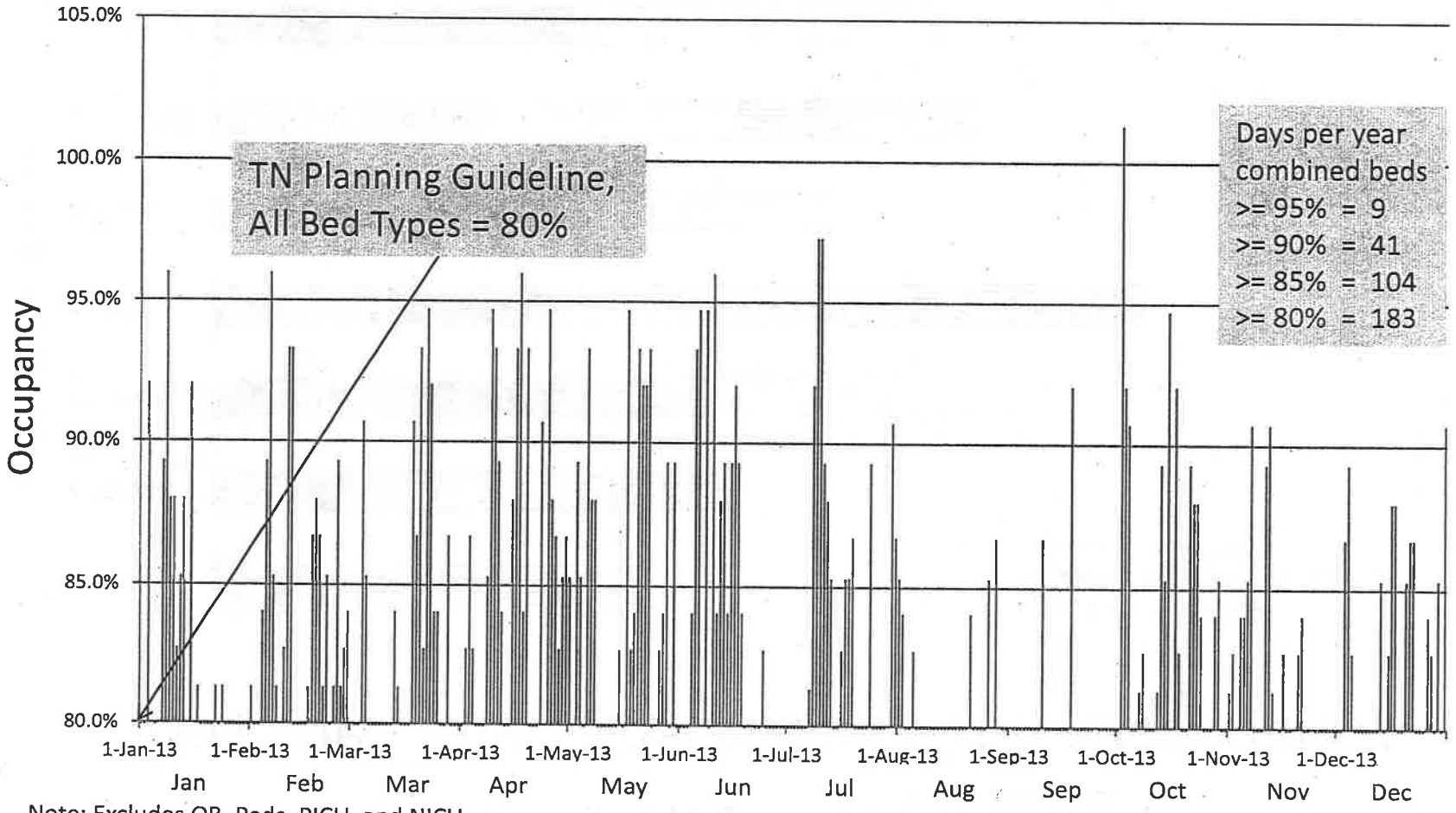
Attachment C, I, Need, 1, Chart 4

2013 UTMC-K Adult ICUs
Days per Year Greater Than 80% Occupancy



*Unit closed Jan – Aug, excluded from summary comments
Note: Excludes OB, Peds, PICU, and NICU
Source: Internal Records

2013 UTMC-K Critical Care All Adult Daily Occupancy (All Units)



Note: Excludes OB, Peds, PICU, and NICU
Source: Internal Records

2018 UTMC-K Poisson Probability Bed Need - Adult Med/Surg and ICUs

	Nursing Unit	2013 Actual ADC	2013-18 Svc Area Pop Grow	2018 Projected ADC	Poisson Bed Need with Integer Rounding Up			2013 Licensed Beds	2018 Poisson Net Bed Need/(Surplus)		
					90% Probability	95% Probability	99% Probability		90% Probability	95% Probability	99% Probability
1	ICU CVICU	8.1	4.8%	8.5	13	14	16	12	1	2	4
2	ICU CVICU	9.0	4.8%	9.4	14	15	17	12	2	3	5
3	ICU MCC2	6.9	4.8%	7.2	11	12	14	8	3	4	6
4	ICU MCC1	10.5	4.8%	11.0	16	17	19	12	4	5	7
5	ICU TSICUO	6.2	4.8%	6.5	10	11	13	8	2	3	5
6	ICU TSICU	11.9	4.8%	12.5	17	19	21	15	2	4	6
7	ICU NCC	6.7	4.8%	7.0	11	12	14	8	3	4	6
	Subtotal	59.3	4.8%	62.1	92	100	114	75	17	25	39
1	M/S 12 EAST	26.7	4.8%	28.0	35	37	41	30	5	7	11
2	M/S 11 EAST	27.9	4.8%	29.2	37	39	42	30	7	9	12
3	M/S 10 EAST	28.4	4.8%	29.8	37	39	43	30	7	9	13
4	M/S 9 EAST	29.3	4.8%	30.7	38	40	44	30	8	10	14
5	M/S 8 EAST	28.4	4.8%	29.8	37	39	43	30	7	9	13
6	M/S 7S NS	16.8	4.8%	17.6	23	25	28	21	2	4	7
7	M/S 7 EAST	16.6	4.8%	17.4	23	25	28	30	(7)	(5)	(2)
8	M/S 6E VT	27.5	4.8%	28.8	36	38	42	30	6	8	12
9	Ortho 5 EAST	28.8	4.8%	30.2	38	40	43	30	8	10	13
10	M/S 4 SOUTH	26.6	4.8%	27.9	35	37	41	28	7	9	13
11	M/S 4 EAST*	2.1	4.8%	2.2	5	5	6	18	(13)	(13)	(12)
12	M/S 3 WEST	27.9	4.8%	29.2	37	39	42	30	7	9	12
	Subtotal	284.9	4.8%	298.6	376	398	437	319	57	79	118
	Total	344.2	4.8%	360.7	468	498	551	394	74	104	157

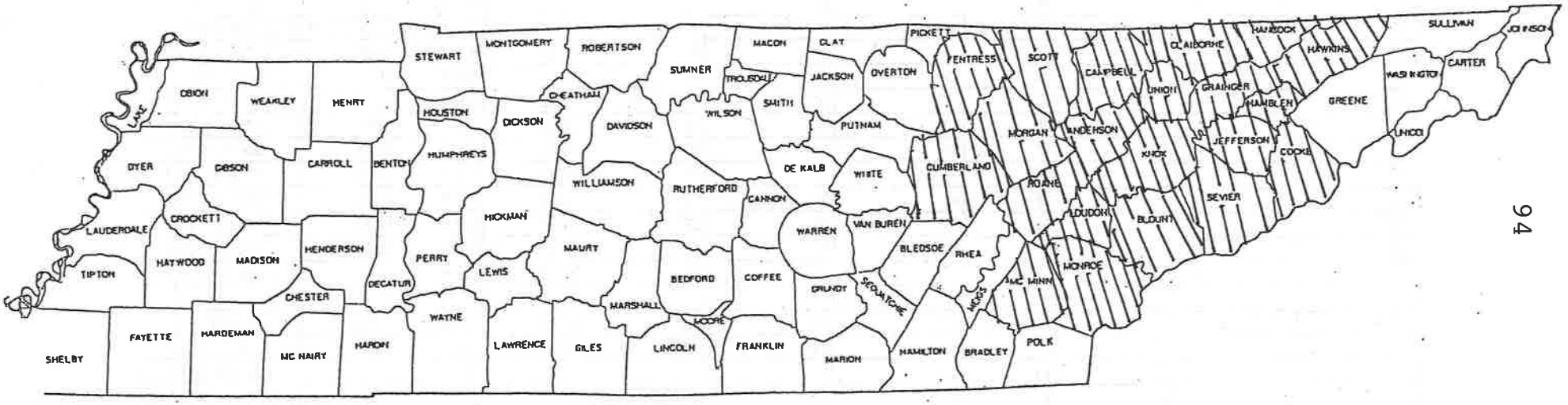
*Unit closed Jan-Aug, excluded from calculations

Note: Includes observation patients/days

Sources: Beds and utilization from internal records; population data from TN Office of Health Statistics, rev 6/2013

SERVICE AREA

UNIVERSITY OF TENNESSEE MEDICAL CENTER



Attachment C, I, Need, 3

POPULATION AND DEMOGRAPHICS OF SERVICE AREA (Page 1)							
Variable	Anderson County	Blount County	Campbell County	Claiborne County	Cocke County	Cumberland County	Fentress County
Current Year (2014), Age 65+	14,531	23,120	7,614	5,880	6,669	15,838	3,566
Projected Year (2018), Age 65+*	16,277	25,829	8,122	6,378	6,871	15,630	3,870
Age 65+, % Change	12.0%	11.7%	6.7%	8.5%	3.0%	-1.3%	8.5%
Age 65+, % Total (PY)	20.9%	19.1%	19.1%	19.2%	17.8%	25.9%	20.4%
CY, Total Population	76,579	128,368	41,474	32,604	36,762	57,815	18,404
PY, Total Population	77,851	135,171	42,566	33,280	38,615	60,292	18,987
Total Pop. % Change	1.7%	5.3%	2.6%	2.1%	5.0%	4.3%	3.2%
TennCare Enrollees (April, 2014)	14,289	19,380	11,805	8,121	10,184	10,735	5,426
TennCare Enrollees as a % of Total Population(CY)	18.7%	15.1%	28.5%	24.9%	27.7%	18.6%	29.5%
Median Age (2010)	43	38	42	41	43	48	42
Median Household Income ('08-'12)	$44,154	$46,347	$31,312	$33,568	$29,764	$37,963	$27,773
Population % Below Poverty Level ('08-'12)	16.7%	12.7%	23.7%	23.0%	26.0%	16.4%	25.4%

Sources: Population, http://health.state.tn.us/statistics/CertNeed.shtml; TennCare enrollment, TennCare Bureau website; Age,TACIR County Profiles website; Income and poverty level, Census Bureau QuickFacts.

POPULATION AND DEMOGRAPHICS OF SERVICE AREA (Page 2)							
Variable	Grainger County	Hamblen County	Hancock County	Hawkins County	Jefferson County	Knox County	Loudon County
Current Year (2014), Age 65+	4,204	11,269	1,300	11,259	9,972	66,392	12,711
Projected Year (2018), Age 65+*	4,557	12,067	1,431	12,990	11,291	78,354	14,179
Age 65+, % Change	8.4%	7.1%	10.1%	15.4%	13.2%	18.0%	11.5%
Age 65+, % Total (PY)	19.2%	18.4%	21.6%	22.3%	19.9%	16.5%	26.7%
CY, Total Population	23,111	64,108	6,652	57,509	53,729	453,629	50,926
PY, Total Population	23,675	65,570	6,640	58,164	56,872	475,569	53,192
Total Pop. % Change	2.4%	2.3%	-0.2%	1.1%	5.8%	4.8%	4.4%
TennCare Enrollees (April, 2014)	5,118	13,519	2,209	12,015	10,568	65,007	7,366
TennCare Enrollees as a % of Total Population(CY)	22.1%	21.1%	33.2%	20.9%	19.7%	14.3%	14.5%
Median Age (2010)	42	40	43	42	41	37	46
Median Household Income ('08-'12)	$33,185	$39,316	$22,205	$36,419	$38,800	$47,270	$49,602
Population % Below Poverty Level ('08-'12)	20.2%	18.6%	32.7%	16.4%	19.2%	14.2%	14.6%

Sources: Population, http://health.state.tn.us/statistics/CertNeed.shtml; TennCare enrollment, TennCare Bureau website; Age,TACIR County Profiles website; Income and poverty level, Census Bureau QuickFacts.

POPULATION AND DEMOGRAPHICS OF SERVICE AREA (Page 3)								
Variable	McMinn County	Monroe County	Morgan County	Roane County	Scott County	Sevier County	Union County	State of Tennessee
Current Year (2014), Age 65+	9,912	8,938	3,436	11,422	3,541	16,768	3,171	981,984
Projected Year (2018), Age 65+*	10,656	10,340	3,796	12,508	3,857	19,252	3,660	1,102,413
Age 65+, % Change	7.5%	15.7%	10.5%	9.5%	8.9%	14.8%	15.4%	12.3%
Age 65+, % Total (PY)	19.7%	21.5%	17.3%	23.0%	17.6%	19.2%	18.7%	16.1%
CY, Total Population	53,233	46,092	21,848	54,006	21,944	94,833	19,301	6,588,698
PY, Total Population	54,203	48,088	22,004	54,457	21,969	100,362	19,605	6,833,509
Total Pop. % Change	1.8%	4.3%	0.7%	0.8%	0.1%	5.8%	1.6%	3.7%
TennCare Enrollees (April, 2014)	10,660	10,221	4,321	10,013	7,177	16,139	4,553	1,241,028
TennCare Enrollees as a % of Total Population(CY)	20.0%	22.2%	19.8%	18.5%	32.7%	17.0%	23.6%	18.8%
Median Age (2010)	42	42	40	45	38	41	40	N/A
Median Household Income ('08-'12)	$38,944	$36,430	$37,522	$43,017	$29,161	$43,300	$33,456	$44,140
Population % Below Poverty Level ('08-'12)	18.5%	19.3%	19.1%	14.4%	25.8%	13.4%	22.6%	17.3%

Sources: Population, http://health.state.tn.us/statistics/CertNeed.shtml; TennCare enrollment, TennCare Bureau website; Age,TACIR County Profiles website; Income and poverty level, Census Bureau QuickFacts.

Joint Annual Report of Hospitals
Occupancy Rates 2012 Final

Name of Hospital	County	Licensed Beds	Staffed Beds	Inpatient Days	Licensed Beds		Staffed Beds	
					Days Open	Occ. Rate	Days Open	Occ. Rate
Methodist Medical Center of Oak Ridge	Anderson	301	255	48,308	109,865	44.0	93,075	51.9
Ridgeview Psychiatric Hospital and Center	Anderson	16	16	3,372	5,840	57.7	5,840	57.7
Blount Memorial Hospital	Blount	304	238	51,691	110,960	46.6	86,870	59.5
Peninsula Hospital	Blount	155	137	29,332	56,575	51.8	50,005	58.7
Tennova Healthcare - Lafollette Medical Center	Campbell	66	66	11,429	24,090	47.4	24,090	47.4
Jellico Community Hospital, Inc.	Campbell	54	31	4,724	19,710	24.0	11,315	41.7
Claiborne County Hospital	Claiborne	85	39	7,178	31,025	23.1	14,235	50.4
Tennova Healthcare - Newport Medical Center	Cocke	74	36	7,607	27,010	28.2	13,140	57.9
Cumberland Medical Center	Cumberland	189	123	22,073	68,985	32.0	44,895	49.2
Jamestown Regional Medical Center	Fentress	85	54	5,422	31,025	17.5	19,710	27.5
Morristown - Hamblen Healthcare System	Hamblen	167	147	25,436	60,955	41.7	53,655	47.4
Lakeway Regional Hospital	Hamblen	135	65	14,064	49,275	28.5	23,725	59.3
Wellmont Hancock County Hospital	Hancock	10	10	1,199	3,650	32.8	3,650	32.8
Wellmont Hawkins County Memorial Hospital	Hawkins	50	46	3,530	18,250	19.3	16,790	21.0
Tennova Healthcare - Jefferson Memorial Hospital	Jefferson	58	58	8,565	21,170	40.5	21,170	40.5
Fort Sanders Regional Medical Center	Knox	517	378	86,156	188,705	45.7	137,970	62.4
Tennova Healthcare	Knox	111	243	74,903	40,515	184.9	88,695	84.5
University of Tennessee Memorial Hospital	Knox	581	534	136,604	212,065	64.4	194,910	70.1
East Tennessee Children's Hospital	Knox	152	152	40,530	55,480	73.1	55,480	73.1
Parkwest Medical Center	Knox	307	297	75,068	112,055	67.0	108,405	69.2
Mercy Medical Center West	Knox	101	101	16,853	36,865	45.7	36,865	45.7
North Knoxville Medical Center	Knox	108	72	15,128	39,420	38.4	26,280	57.6
Select Specialty Hospital - Knoxville	Knox	35	35	10,153	12,775	79.5	12,775	79.5
Select Specialty Hospital - North Knoxville	Knox	33	33	9,127	12,045	75.8	12,045	75.8
Fort Loudoun Medical Center	Loudon	50	30	6,195	18,250	33.9	10,950	56.6
Woods Memorial Hospital	McMinn	72	48	7,526	26,280	28.6	17,520	43.0
Athens Regional Medical Center	McMinn	118	63	8,366	43,070	19.4	22,995	36.4
Sweetwater Hospital Association	Monroe	59	59	10,251	21,535	47.6	21,535	47.6
Roane Medical Center	Roane	105	36	6,620	38,325	17.3	13,140	50.4
LeConte Medical Center	Sevier	79	69	13,269	28,835	46.0	25,185	52.7
Service Area Average						46.7%		53.6%

Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics

3/13/2014

Outstanding Certificate of Need Projects Relating to Hospitals

CON Number	Action	Project Name	County	Project Description	Meeting Date	Expiration Date	Total Project Cost
CN1211-055	A	HMA Fentress County Hospital, LLC d/b/a Jamestown Regional Medical Center	Fentress	Establishment of 6 swing beds and initiation of swing bed services by converting 6 med/surg beds. Licensed bed complement will not change. No other services, will be initiated or discontinue, no major medical equipment is requested, and no renovations.	2/27/2013	4/1/2016	$30,677.00
CN1405-013	A	Lakeway Regional Hospital	Hamblen	To discontinue obstetrical (OB) service. The 16 OB beds will be redistributed to general medical/surgical beds. The 135 licensed bed complement will remain unchanged.	8/27/2014	10/1/2017	$33,000.00
CN1009-040	A	Morristown-Hamblen Hospital	Hamblen	the acquisition of a stationary (fixed) PET/CT unit to replace and upgrade the existing mobile equipment. Construction to modify an existing building on the hospital campus.	12/15/2010	2/1/2015	$4,695,707.00
CN1211-056	A	Metro Knoxville HMA, LLC d/b/a Tennova Healthcare, North Knoxville Medical Center	Knox	Initiation of diagnostic cardiac cath services. The project involves construction and equipping of shell space within the hospital to serve as a dual cardiac cath/vascular lab, support areas for lab, expanded waiting room & additional pre/post-operative	2/27/2013	4/1/2016	$4,377,421.00
CN1312-047	A	Select Specialty Hospital–North Knoxville	Knox	The relocation of 33 long term acute care beds from 900 East Oak Hill Ave., 4th Floor, Knoxville 37917 to leased space at North Knoxville Medical Center, Physicians Plaza B, 1st Floor, Knoxville (Knox Co.), TN 37849.	3/26/2014	5/1/2017	$13,910,744.00
CN1401-002	A	East Tennessee Children's Hospital	Knox	Renovation and expansion of the NICU, Neonatal Abstinence Syndrome Unit, Perioperative Services, and Specialty clinic located on the hospital's campus. No licensed beds affected, no services initiated and no major medical equipment will be purchased.	4/23/2014	6/1/2018	$75,302,000.00
:N1106-019	A	Mercy Health System, Inc. dba Mercy Medical Center, North	Knox	The acquisition of a second linear accelerator to be located and utilized on the Mercy Medical Center, North campus. No new services will be initiated and the radiation therapy services at Mercy Riverside will be relinquished. No inpatient beds involved	10/26/2011	12/1/2014	$4,694,671.00
:N0912-056	A	University of Tennessee Medical Center, The	Knox	The interior build out of appx. 47,428 sf of shelled-in space, on the 3rd and 4th floors of the new hospital wing (CN0801-004A) to house patient rooms for cardiology and cardiothoracic patients. No additional beds, no new services initiated or equipment.	3/24/2010	5/1/2015	$13,941,818.00
:N1005-022	A	University of Tennessee Medical Center	Knox	Construction of an addition to the existing surgery facilities consisting of apprx. 28,000 SF of space to house 13 new operating rooms. Also includes the renovation of existing space in the surgical facilities and the addition of new endovascular suite.	8/25/2010	4/1/2015	$18,432,272.00
:N1404-009	A	Starr Regional Medical Center–Etowah	McMinn	Addtion of 4 geropsychiatric beds to its existing 10-bed inpatient geropsychiatric unit for a 14 bed unit. 4 of the 72 acute care hospital beds at the hospital will be delicensed and the bed complement will remain the same.	7/23/2014	9/1/2017	$1,282,050.00

Attachment C, I, Need, 5 (2)

bma BARBERMcMURRY
architects since 1915

September 10, 2014

Mr. Scott Castleberry
Director Facilities Planning and Construction Services
University Health System, Inc.
1924 Alcoa Highway
Knoxville, TN 37920

RE: UHS NICU Phase II
Knoxville, Tennessee
BMa Project No. 132000

Dear Mr. Castleberry:

Thank you for selecting BarberMcMurry architects as your Architect-of-Record for the above referenced project. This firm has provided you, under separate cover, a preliminary floor plan showing the building described in the program and narratives. We have reviewed the construction cost estimate. Based on our experience and knowledge of the current healthcare market, it is our professional opinion and belief that the projected cost of $16,031,504.00 to be a reasonable estimate of construction cost. We also agree the $2,404,725.60 contingency amount is appropriate for the scope of work required.

This project will be designed to meet all applicable building codes, as listed below:

State:

1. International Building Code (IBC) - 2012 Edition
2. International Mechanical Code - 2012 Edition
3. International Plumbing Code - 2012 Edition
4. International Gas Code - 2012 Edition
5. International Fire Code - 2012 Edition
6. National Electric Code - 2011 Edition
7. NFPA 101, Life Safety Code - 2012 Edition
8. NFPA Codes (all volumes)- Editions referenced in 2012 NFPA 1
9. FGI Guidelines For Construction and Equipment of Hospital and Medical Facilities- 2010 Edition
10. Tennessee Department of Health Standards for Licensing Hospitals and Institutional General Infirmaries
11. Architectural and Engineering Guidelines for Submission, Approval and Inspection of Occupancies Licensed by the Department of Health, TDOH Office of Health Licensure and Regulation
12. U.L. Building Fire Resistant Directory - Most current Edition
13. U.L. Building Materials Directory - Most current Edition
14. The Americans with Disabilities Act (ADA), 2010 Accessibility Guidelines for Buildings and Facilities
15. North Carolina Accessibility Code, 2004 Edition

505 Market St Suite 300 . Knoxville TN 37902 . p 865.934.1915 . f 865.546.0242 . bma1915.com

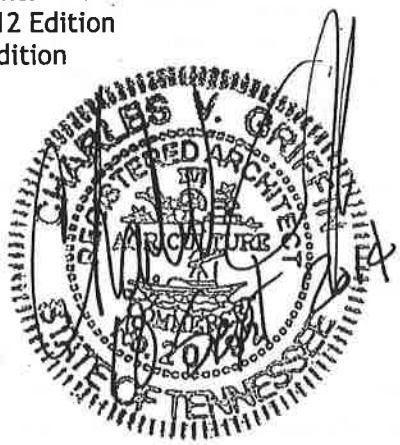
16. Tennessee Code for Energy conservation in New Building Construction

Federal:

1. The Americans with Disabilities Act (ADA), 2010 Accessibility Guidelines for Buildings and Facilities

Local:

1. International Building Code - 2012 Edition
2. 2009 ICC/ANSI A117.1
3. International Mechanical Code - 2012 Edition
4. International Plumbing Code - 2012 Edition
5. National Electric Code - 2008 Edition
6. International Fire Code with Local Amendments - 2012 Edition
7. International Energy Conservation Code - 2012 Edition
8. International Existing Building Code - 2012 Edition
9. International Fuel Gas Code - 2012 Edition



Sincerely,

BarberMcMurry architects

Charles V. Griffin, AIA
President
TN. License No. 020192
cc: File

H:\2013\132000 UT NICU Phase 2\01_Administrative\04_Regulatory\CON Letter_Castleberry_2014-09-10.docx

University Health System, Inc.
2121 Medical Center Way, Suite 200
Knoxville, TN 37920-3257
Main: 865.305.6097
Fax: 865.305.9429

September 15, 2014

Ms. Melanie Hill
Executive Director
Tennessee Health Services and Development Agency
Andrew Jackson State Office Building
500 Deaderick Street, Suite 850
Nashville, TN 37243

RE: University of Tennessee Medical Center CON Project
For additional licensed beds and completion of NICU project

Dear Ms. Hill:

I am the Chief Financial Officer for the University of Tennessee Medical Center ("UTMC"). Please accept this letter as verification that funding for the CON referenced above is available and will be provided from the cash reserves of UTMC. The total project cost is estimated to be in the amount of approximately $27 million.

Please let me know if you have any questions or if additional information is needed.

Sincerely,

Thomas M. Fisher
Sr. Vice President & CFO

/hc

KPMG

UNIVERSITY HEALTH SYSTEM, INC. AND SUBSIDIARIES

Consolidated Financial Statements and Schedules

December 31, 2013 and 2012

(With Independent Auditors' Reports Thereon)

KPMG LLP
Suite 1000
401 Commerce Street
Nashville, TN 37219-2422

Independent Auditors' Report

The Board of Directors
University Health System, Inc.:

We have audited the accompanying consolidated financial statements of University Health System, Inc. and subsidiaries (UHS), which comprise the consolidated balance sheets as of December 31, 2013 and 2012, and the related consolidated statements of operations, changes in net assets, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

The management of UHS is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to UHS' preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of UHS' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

KPMG

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of University Health System, Inc. and subsidiaries as of December 31, 2013 and 2012, and the results of their operations and their cash flows for the years then ended, in accordance with U.S. generally accepted accounting principles.

KPMG LLP

Nashville, Tennessee
March 24, 2014

UNIVERSITY HEALTH SYSTEM, INC.
AND SUBSIDIARIES

Consolidated Balance Sheets

December 31, 2013 and 2012

Assets	2013	2012
Current assets:		
Cash and cash equivalents	$ 69,613,960	64,459,130
Short-term investments	8,156,626	16,213,189
Current portion of assets limited as to use	287,713	205,534
Patient accounts receivable, net of allowance for doubtful accounts of $41,228,000 and $40,393,000 at December 31, 2013 and 2012, respectively	73,347,066	72,489,282
Other receivables	6,937,231	6,647,541
Estimated third-party settlements	16,236,867	19,998,341
Inventories	5,354,591	5,507,111
Prepaid expenses and other current assets	1,197,047	1,440,648
Total current assets	181,131,101	186,960,776
Assets limited as to use, less current portion	14,858,078	11,034,902
Long-term investments	158,122,081	136,115,854
Property and equipment, net	205,459,364	203,440,802
Deferred financing costs, net of accumulated amortization of $517,000 and $425,000 at December 31, 2013 and 2012, respectively	1,988,326	2,080,017
Investments in affiliated organizations	2,333,408	2,647,094
Other assets	7,491,651	5,880,407
Total assets	$ 571,384,009	548,159,852
Liabilities and Net Assets		
Current liabilities:		
Current portion of long-term debt	$ 12,347,046	10,325,303
Accounts payable	55,096,388	48,189,513
Accrued payroll and related liabilities	33,638,885	30,267,632
Accrued expenses and other current liabilities	21,673,184	20,687,411
Estimated third-party settlements	8,011,395	7,988,998
Total current liabilities	130,766,898	117,458,857
Long-term debt, less current portion	268,344,281	271,352,198
Other liabilities	19,391,004	15,735,586
Total liabilities	418,502,183	404,546,641
Net assets:		
Unrestricted	144,384,710	135,492,995
Temporarily restricted	3,033,780	3,004,377
Permanently restricted	5,463,336	5,115,839
Total net assets	152,881,826	143,613,211
Total liabilities and net assets	$ 571,384,009	548,159,852

See accompanying notes to consolidated financial statements.

UNIVERSITY HEALTH SYSTEM, INC.
AND SUBSIDIARIES

Consolidated Statements of Operations

Years ended December 31, 2013 and 2012

	2013	2012
Revenue:		
Net patient service revenue	$ 657,185,061	599,093,457
Provision for doubtful accounts	(62,306,309)	(61,277,376)
Net patient service revenue less provision for doubtful accounts	594,878,752	537,816,081
Other revenue	36,565,036	36,995,804
Total revenue	631,443,788	574,811,885
Operating expenses:		
Salaries, wages, and benefits	273,738,240	256,646,078
Medical supplies and drugs	164,893,472	139,614,343
Purchased services	88,648,028	78,773,484
Graduate medical education reimbursed to the University	31,806,637	31,120,692
Insurance and other	29,149,125	28,148,288
Interest	12,277,022	12,218,668
Depreciation and amortization	25,931,840	24,490,737
Total operating expenses	626,444,364	571,012,290
Operating income	4,999,424	3,799,595
Nonoperating gains:		
Contributions	1,922,094	3,606,812
Investment income	5,899,369	7,958,604
Change in fair value of derivative instrument	(3,929,172)	3,995,761
Total nonoperating gains, net	3,892,291	15,561,177
Revenue and gains in excess of expenses and losses	$ 8,891,715	19,360,772

See accompanying notes to consolidated financial statements.

UNIVERSITY HEALTH SYSTEM, INC.
AND SUBSIDIARIES

Consolidated Statements of Changes in Net Assets

Years ended December 31, 2013 and 2012

	Unrestricted net assets	Temporarily restricted net assets	Permanently restricted net assets	Total net assets
Balance at December 31, 2011	$ 116,132,223	3,134,867	5,053,322	124,320,412
Revenue and gains in excess of expenses and losses	19,360,772	—	—	19,360,772
Contributions	—	2,273,242	62,517	2,335,759
Net assets released from restriction used in operations	—	(2,403,732)	—	(2,403,732)
Balance at December 31, 2012	135,492,995	3,004,377	5,115,839	143,613,211
Revenue and gains in excess of expenses and losses	8,891,715	—	—	8,891,715
Contributions	—	1,921,787	347,497	2,269,284
Net assets released from restriction used in operations	—	(1,892,384)	—	(1,892,384)
Balance at December 31, 2013	$ 144,384,710	3,033,780	5,463,336	152,881,826

See accompanying notes to consolidated financial statements.

UNIVERSITY HEALTH SYSTEM, INC.
AND SUBSIDIARIES

Consolidated Statements of Cash Flows

Years ended December 31, 2013 and 2012

	2013	2012
Cash flows from operating activities:		
Increase in total net assets	$ 9,268,615	19,292,799
Adjustments to reconcile increase in total net assets to net cash provided by operating activities:		
Depreciation and amortization	25,931,840	24,490,737
Provision for doubtful accounts	62,306,309	61,277,376
Equity in earnings of affiliated organizations	(2,039,077)	(1,281,993)
Imputed interest on capital lease obligation	1,975,737	1,865,592
Changes in unrealized gains on trading securities	(2,435,254)	(2,909,056)
Realized losses (gains) on trading securities	1,098,461	(795,476)
Change in fair value of derivative instrument	3,929,172	(3,995,761)
Amortization of financing costs	91,691	91,960
Amortization of bond premium	(385,886)	(431,599)
Gain on sale of assets, net	729,391	(75,357)
Changes in assets and liabilities affecting operating activities:		
Patient accounts receivable	(63,164,093)	(65,704,320)
Other receivables	(289,690)	(1,862,372)
Estimated third-party settlements	3,783,871	927,198
Inventories	152,520	679,508
Prepaid expenses and other assets	(1,367,643)	(2,730,256)
Accounts payable	3,937,616	790,025
Accrued payroll and related liabilities	3,371,253	2,490,762
Accrued expenses and other liabilities	712,019	4,334,473
Net cash provided by operating activities	47,606,852	36,454,240
Cash flows from investing activities:		
Proceeds from sale or maturity of investments	307,054,849	243,358,754
Purchases of investments	(323,573,075)	(249,958,175)
Purchases of property and equipment	(19,793,617)	(30,776,548)
Proceeds from the sale of assets	1,197	1,228
Capital distributions from affiliated organization	2,352,763	1,235,756
Net cash used in investing activities	(33,957,883)	(36,138,985)
Cash flows from financing activities:		
Proceeds from issuance of long-term debt	2,493,960	21,994,846
Payments of long-term debt	(10,988,099)	(11,339,053)
Net cash (used in) provided by financing activities	(8,494,139)	10,655,793
Increase in cash and cash equivalents	5,154,830	10,971,048
Cash and cash equivalents at beginning of year	64,459,130	53,488,082
Cash and cash equivalents at end of year	$ 69,613,960	64,459,130

(Continued)

UNIVERSITY HEALTH SYSTEM, INC.
AND SUBSIDIARIES

Consolidated Statements of Cash Flows

Years ended December 31, 2013 and 2012

		2013	2012
Supplemental disclosure of cash flow information:			
Cash paid for interest, net of amount capitalized of $269,798 and $160,497, respectively	$	11,448,645	11,767,814
Noncash investing activities:			
Assets and liabilities resulting from equipment purchases:			
Equipment	$	8,887,373	788,828
Accounts payable		2,969,259	536,931
Capital lease		5,918,114	251,897

See accompanying notes to consolidated financial statements.

AFFIDAVIT

STATE OF TENNESSEE

COUNTY OF KNOX

Teresa Levey, being first duly sworn, says that he/she is the applicant named in this application or his/her/its lawful agent, that this project will be completed in accordance with the application, that the applicant has read the directions to this application, the Rules of the Health Services and Development Agency, and T.C.A. § 68-11-1601, *et seq.*, and that the responses to this application or any other questions deemed appropriate by the Health Services and Development Agency are true and complete.

Teresa Levey
SIGNATURE

Sr. VP & Chief Administrative Officer
TITLE

Sworn to and subscribed before me this 12 day of September, 2014 a Notary Public in and for Knox County, Tennessee.

WENDY S. O'NEAL
STATE OF TENNESSEE NOTARY PUBLIC
COUNTY OF KNOX

Wendy S. O'Neal
NOTARY PUBLIC

My commission expires 3/31/18.

Accreditation/Certification List
UTMC

Program Accredited/Certified	Organization	Begin Date of Accreditation/ Certification – Site Visit	Expiration Date or Expected Return
UTMC	Joint Commission	9/23/2011	**2014**
UTMC	State Licensure	8/20/2008	Pending
Cancer Center			
Cancer Program	ACS,COC 3 year	5/12/2011	5/11/2014
Breast Center	ACS NAPBC ACRA	**4/30/2014** 5/13/11 1/09/2011	4/30/2017 **5/12/14** 2/22/2015(STEREO) **9/22/2014 FDA**
Breast Ultrasound	ACR	**1/09/2014**	**1/9/2017**
Mammography	ACR	9/19-9/22/2011	9/22/2014 (PENDING RENEWAL)
Lab			
LabCorp –Main Lab UTMC	CAP State CLIA AABB	**1/14 & 1/15/2014** 4/30/2012 7/27/2011 1/1/14	1/15/2016 4/30/2014 7/25/2015 12/31/2015
UTMC Point of Care Licenses	CAP State CLIA CMS	**1/14 & 1/15/2014** 9/17/2013 7/22/2013 **4/3/14**	1/15/2016 9/16/2015 7/25/2015 4/2/17
Special Coag Lab Inspection (Hemophilia)	CAP State CLIA	1/14 & 1/15/2014 9/11/2013 12/11/2013	1/26/2016 **10/31/14** 11/30/2015
Radiology			
Magnetic Resonance	ACR	10/14/2011	10/14/2014
Nuc Med Rb82 Generator Inspection	State	5/19/2014- ? One time State visit **1/29 & 1/30/ 14**	n/a
Nuc Med (SIR spheres therapy d/t radiation error)	State	10/15/12-10/16/12	10/14/2015
Radiology	ACR	Online beginning 2012	Online

Program Accredited/Certified	Organization	Begin Date of Accreditation/ Certification – Site Visit	Expiration Date or Expected Return
	State	3/06/2012	**3/06/2014**
Radioactive Material Licensure	State	01/09/2011	**1/08/2014**
Radiology JRCERT Site visit		8/05/2011	8/05/2019
Stereotactic Breast Biopsy	ACR	2/22/2012	2/22/2015
Computed Tomography/CT	ACR	10/12/2008	Not renewed
Positron Emission Tomography	ACR	5/20/2013	5/19/2016
Ultrasound	ACR	6/13/2012	6/13/2015
Other			
Bariatric Center	ACS BSCN	4/23/2013	4/22/2015
Cardiovascular and Pulmonary Rehab	American Association of Cardiac and Pulmonary Rehabilitation	8/31/2012	8/31/2015
Joint Center TJC Certification	Joint Commission Site Visit Intracycle Review	12/06/2012	12/06/2014 12/06/2013 (Call)
Level 1 Trauma Survey	State ACS Consultation	9/10/2013 **2/10 & 2/11/2014**	9/9/2016 N/A
Stroke Advanced Comprehensive TJC Certification	Joint Commission TJC Intra-cycle Certification (Phone Call)	3/20 & 3/21/2013	3/21/2015 **3/20/2014 (Call)**
UT Sleep Center	American Academy of Sleep Medicine	9/09/2011	9/08/2016
Transplant	CMS UNOS- Chart Audits on Deceased Transplant Patients	08/01 & 8/2/2012 12/4 &12/5/2012 4/09/2012 4/23 & 4/24/2013	August 2015 N/A

Board for Licensing Health Care Facilities

State of Tennessee

0000000046

No. of Beds 0581

DEPARTMENT OF HEALTH

This is to certify, that a license is hereby granted by the State Department of Health to

UNIVERSITY HEALTH SYSTEM, INC *to conduct and maintain a*

Hospital THE UNIVERSITY OF TENNESSEE MEDICAL CENTER

Located at 1924 ALCOA HIGHWAY, KNOXVILLE

County of KNOX *, Tennessee.*

This license shall expire MARCH 04 *,* 2015 *, and is subject to the provisions of Chapter 11, Tennessee Code Annotated. This license shall not be assignable or transferable, and shall be subject to revocation at any time by the State Department of Health, for failure to comply with the laws of the State of Tennessee or the rules and regulations of the State Department of Health issued thereunder.*

In Witness Whereof, we have hereunto set our hand and seal of the State this 4TH *day of* MARCH *,* 2014 *.*

In the Distinct Category(ies) of:
GENERAL HOSPITAL
PEDIATRIC GENERAL HOSPITAL
TRAUMA CENTER LEVEL 1

By Vincent J. Davis, MPH
DIRECTOR, DIVISION OF HEALTH CARE FACILITIES

By [signature]
COMMISSIONER

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Attachment C, III, Orderly Development, 7 (2)

The Joint Commission

December 15, 2011

Joe Landsman, CPA
CEO
The University of Tennessee Memorial Hospital
1924 Alcoa Highway
Knoxville, TN 37920

Joint Commission ID #: 7853
Program: Hospital Accreditation
Accreditation Activity: 60-day Evidence of Standards Compliance
Accreditation Activity Completed: 12/15/2011

Dear Mr. Landsman:

The Joint Commission would like to thank your organization for participating in the accreditation process. This process is designed to help your organization continuously provide safe, high-quality care, treatment, and services by identifying opportunities for improvement in your processes and helping you follow through on and implement these improvements. We encourage you to use the accreditation process as a continuous standards compliance and operational improvement tool.

The Joint Commission is granting your organization an accreditation decision of Accredited for all services surveyed under the applicable manual(s) noted below:

- Comprehensive Accreditation Manual for Hospitals

This accreditation cycle is effective beginning September 24, 2011. The Joint Commission reserves the right to shorten or lengthen the duration of the cycle; however, the certificate and cycle are customarily valid for up to 36 months.

Please visit Quality Check® on The Joint Commission web site for updated information related to your accreditation decision.

We encourage you to share this accreditation decision with your organization's appropriate staff, leadership, and governing body. You may also want to inform the Centers for Medicare and Medicaid Services (CMS), state or regional regulatory services, and the public you serve of your organization's accreditation decision.

Please be assured that The Joint Commission will keep the report confidential, except as required by law. To ensure that The Joint Commission's information about your organization is always accurate and current, our policy requires that you inform us of any changes in the name or ownership of your organization or the health care services you provide.

Sincerely,

Ann Scott Blouin RN, PhD

Ann Scott Blouin, RN, Ph.D.
Executive Vice President
Accreditation and Certification Operations

The Joint Commission

The University of Tennessee Memorial Hospital
1924 Alcoa Highway
Knoxville, TN 37920

Organization Identification Number: 7853

Program(s)	Survey Date(s)
Hospital Accreditation	11/03/2011-11/03/2011

Executive Summary

Hospital Accreditation : As a result of the accreditation activity conducted on the above date(s), there were no Requirements for Improvement identified.

If you have any questions, please do not hesitate to contact your Account Executive.

Thank you for collaborating with The Joint Commission to improve the safety and quality of care provided to patients.

The Joint Commission

The University of Tennessee Memorial Hospital
1924 Alcoa Highway
Knoxville, TN 37920

Organization Identification Number: 7853

Program(s)	Survey Date(s)
Hospital Accreditation	09/19/2011-09/23/2011

Executive Summary

Hospital Accreditation : As a result of the accreditation activity conducted on the above date(s), you have met the criteria for Accreditation with Follow-up Survey.

You will have follow-up in the area(s) indicated below:

- As a result of a Condition Level Deficiency, an Unannounced Medicare Deficiency Follow-up Survey will occur. Please address and correct any Condition Level Deficiencies immediately, as the follow-up event addressing these deficiencies will occur within 45 days of the last survey date identified above. The follow-up event is in addition to the written Evidence of Standards Compliance response.
- Evidence of Standards Compliance (ESC)

If you have any questions, please do not hesitate to contact your Account Executive.

Thank you for collaborating with The Joint Commission to improve the safety and quality of care provided to patients.

Evidence of DIRECT Impact Standards Compliance is due within 45 days from the day this report is posted to your organization's extranet site:

Program:	Hospital Accreditation Program	
Standards:	EC.02.03.01	EP1
	EC.02.05.01	EP6
	EC.02.05.09	EP1
	IC.02.02.01	EP1,EP2
	MM.04.01.01	EP13
	PC.01.02.09	EP4
	RI.01.03.01	EP11,EP13
	UP.01.03.01	EP4

Evidence of INDIRECT Impact Standards Compliance is due within 60 days from the day this report is posted to your organization's extranet site:

Program:	Hospital Accreditation Program	
Standards:	EC.02.01.01	EP1
	EM.02.01.01	EP2
	LD.01.03.01	EP2
	LS.02.01.20	EP12
	LS.02.01.30	EP11,EP23
	LS.02.01.35	EP4
	MM.05.01.01	EP1
	MS.01.01.01	EP3,EP16

*** OCO - Observed Corrected Onsite.**

CoP: §482.12 **Tag:** A-0043 **Deficiency:** Condition

Corresponds to: HAP - LD.01.03.01/EP2

Text: §482.12 Condition of Participation: Governing Body

The hospital must have an effective governing body legally responsible for the conduct of the hospital as an institution. If a hospital does not have an organized governing body, the persons legally responsible for the conduct of the hospital must carry out the functions specified in this part that pertain to the governing body.

CoP Standard	Tag	Corresponds to	Deficiency
§482.12(a)(3)	A-0047	HAP - MS.01.01.01/EP3	Standard

CoP: §482.22 **Tag:** A-0338 **Deficiency:** Standard

Corresponds to: HAP

Text: §482.22 Condition of Participation: Medical staff

The hospital must have an organized medical staff that operates under bylaws approved by the governing body and is responsible for the quality of medical care provided to patients by the hospital.

CoP Standard	Tag	Corresponds to	Deficiency
§482.22(c)(5)(i)	A-0358	HAP - MS.01.01.01/EP16	Standard

CoP: §482.23 **Tag:** A-0385 **Deficiency:** Standard

Corresponds to: HAP

Text: §482.23 Condition of Participation: Nursing Services

The hospital must have an organized nursing service that provides 24-hour nursing services. The nursing services must be furnished or supervised by a registered nurse.

CoP Standard	Tag	Corresponds to	Deficiency
§482.23(c)(2)	A-0406	HAP - MM.04.01.01/EP13	Standard

CoP: §482.25 **Tag:** A-0490 **Deficiency:** Standard

Corresponds to: HAP

Text: §482.25 Condition of Participation: Pharmaceutical Services

The hospital must have pharmaceutical services that meet the needs of the patients. The institution must have a pharmacy directed by a registered pharmacist or a drug storage area under competent supervision. The medical staff is responsible for developing policies and procedures that minimize drug errors. This function may be delegated to the hospital's organized pharmaceutical service.

CoP Standard	Tag	Corresponds to	Deficiency
§482.25(b)	A-0500	HAP - MM.05.01.01/EP1	Standard

CoP: §482.41 **Tag:** A-0700 **Deficiency:** Standard

Corresponds to: HAP

Text: §482.41 Condition of Participation: Physical Environment

The hospital must be constructed, arranged, and maintained to ensure the safety of the patient, and to provide facilities for diagnosis and treatment and for special hospital services appropriate to the needs of the community.

CoP Standard	Tag	Corresponds to	Deficiency
§482.41(a)	A-0701	HAP - EC.02.01.01/EP1	Standard
§482.41(b)(1)(i)	A-0710	HAP - LS.02.01.20/EP12, LS.02.01.30/EP11, EP23, LS.02.01.35/EP4	Standard

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CoP: §482.42 **Tag:** A-0747 **Deficiency:** Condition

Corresponds to: HAP - IC.02.02.01/EP1

Text: §482.42 Condition of Participation: Infection Control

The hospital must provide a sanitary environment to avoid sources and transmission of infections and communicable diseases. There must be an active program for the prevention, control, and investigation of infections and communicable diseases.

CoP: §482.51 **Tag:** A-0940 **Deficiency:** Condition

Corresponds to: HAP - IC.02.02.01/EP2, EC.02.05.01/EP6

Text: §482.51 Condition of Participation: Surgical Services

If the hospital provides surgical services, the services must be well organized and provided in accordance with acceptable standards of practice. If outpatient surgical services are offered the services must be consistent in quality with inpatient care in accordance with the complexity of services offered.

CoP Standard	Tag	Corresponds to	Deficiency
§482.51(b)(2)	A-0955	HAP - RI.01.03.01/EP11, EP13	Standard
§482.51(b)	A-0951	HAP - EC.02.03.01/EP1	Standard

Chapter: Emergency Management

Program: Hospital Accreditation

Standard: EM.02.01.01 ESC 60 days

Standard Text: The hospital has an Emergency Operations Plan.
Note: The hospital's Emergency Operations Plan (EOP) is designed to coordinate its communications, resources and assets, safety and security, staff responsibilities, utilities, and patient clinical and support activities during an emergency (refer to Standards EM.02.02.01, EM.02.02.03, EM.02.02.05, EM.02.02.07, EM.02.02.09, and EM.02.02.11). Although emergencies have many causes, the effects on these areas of the organization and the required response effort may be similar. This 'all hazards' approach supports a general response capability that is sufficiently nimble to address a range of emergencies of different duration, scale, and cause. For this reason, the Plan's response procedures address the prioritized emergencies but are also adaptable to other emergencies that the organization may experience.

Primary Priority Focus Area: Patient Safety

Element(s) of Performance:

2. The hospital develops and maintains a written Emergency Operations Plan that describes the response procedures to follow when emergencies occur. (See also EM.03.01.03, EP 5) 4
Note: The response procedures address the prioritized emergencies but can also be adapted to other emergencies that the hospital may experience. Response procedures could include the following:
- Maintaining or expanding services
- Conserving resources
- Curtailing services
- Supplementing resources from outside the local community
- Closing the hospital to new patients
- Staged evacuation
- Total evacuation

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 2
Observed in Building Tour at University Cancer Specialists (908 West Fourth North Street, Morristown, TN) site.
In discussion with the staff at the facility, which is approximately 49 miles from the main hospital, it was noted there is no Emergency Operations Plan for the facility. The hospital plan does not address what is to occur in this facility in the event of a disaster either.

Chapter: Environment of Care

Program: Hospital Accreditation

Standard: EC.02.01.01 ESC 60 days

Standard Text: The hospital manages safety and security risks.

Primary Priority Focus Area: Physical Environment

Element(s) of Performance:

1. The hospital identifies safety and security risks associated with the environment of care that could affect patients, staff, and other people coming to the hospital's facilities. 
Note: Risks are identified from internal sources such as ongoing monitoring of the environment, results of root cause analyses, results of annual proactive risk assessments of high-risk processes, and from credible external sources such as Sentinel Event Alerts. (See also EC.04.01.01, EP 14)

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 1
§482.41(a) - (A-0701) - §482.41(a) Standard: Buildings

The condition of the physical plant and the overall hospital environment must be developed and maintained in such a manner that the safety and well-being of patients are assured.
This Standard is NOT MET as evidenced by:
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Inside of OR # 21, there were approximately 4 large extension cords being utilized for various equipment. The extension cords had four-gang outlet conduit boxes lying on the floor used to plug in equipment.

Chapter: Environment of Care
Program: Hospital Accreditation
Standard: EC.02.03.01 ESC 45 days
Standard Text: The hospital manages fire risks.
Primary Priority Focus Area: Physical Environment

Element(s) of Performance:

1. The hospital minimizes the potential for harm from fire, smoke, and other products of combustion. 

Scoring Category : C
Score : Insufficient Compliance

Observation(s):

EP 1
§482.51(b) - (A-0951) - §482.51(b) Standard: Delivery of Service

Surgical services must be consistent with needs and resources. Policies governing surgical care must be designed to assure the achievement and maintenance of high standards of medical practice and patient care.
This Standard is NOT MET as evidenced by:
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At the entrance to the Heart Hospital on the third floor, two 120 volt junction box covers were not in place. This was observed but corrected on site.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Inside the storage room on the third floor of the Heart Hospital, one junction box cover had been removed inside of the large storage room across from the nurses station.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At the MCC1 staff locker room, a junction box cover was missing. This was observed but corrected on site.

Chapter: Environment of Care

Program: Hospital Accreditation

Standard: EC.02.05.01 ESC 45 days

Standard Text: The hospital manages risks associated with its utility systems.

Primary Priority Focus Area: Physical Environment

Element(s) of Performance:

6. In areas designed to control airborne contaminants (such as biological agents, gases, fumes, dust), the ventilation system provides appropriate pressure relationships, air-exchange rates, and filtration efficiencies. 3
Note: Areas designed for control of airborne contaminants include spaces such as operating rooms, special procedure rooms, delivery rooms for patients diagnosed with or suspected of having airborne communicable diseases (for example, pulmonary or laryngeal tuberculosis), patients in 'protective environment' rooms (for example, those receiving bone marrow transplants), laboratories, pharmacies, and sterile supply rooms. For further information, see Guidelines for Design and Construction of Health Care Facilities, 2010 edition, administered by the Facility Guidelines Institute and published by the American Society for Healthcare Engineering (ASHE).

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 6
§482.51 - (A-0940) - §482.51 Condition of Participation: Condition of Participation: Surgical Services
This Condition is NOT MET as evidenced by:
Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the airflow/pressure relationships in central sterilization for the main hospital operating room suites revealed that the clean area was negative compared to the dirty area instead of positive. The clean area was also negative compared to an adjacent hallway instead of positive.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the airflow/pressure relationships in several rooms in the operative and peri-operative services in the Day Surgery area revealed several instances where the airflow/pressure relationships were not correct. Operating room 2 was negative instead of positive with respect to the adjacent hallway. In central sterilization the clean room was negative instead of positive with respect to the adjacent hallway and the dirty room was neutral instead of negative with respect to the adjacent hallway.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the endoscope disinfection process in the Day Surgery area revealed that both cleaning and disinfection are done in the same room. There is no physical barrier between the dirty area and the clean area. The scopes are washed in tubs placed on a cabinet immediately adjacent to the disinfection machine. In the absence of physical barrier separation of dirty from clean areas, the current arrangement does not provide for sufficient compensatory measures such as adequate spatial separation and appropriate airflow characteristics.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the endoscope disinfection process at the main hospital endoscopy suite revealed that cleaning and disinfection are done in the same room. There is no physical barrier between the clean area and the dirty area. The first disinfection machine is located about 3 - 4 feet from a sink used to wash the scopes. In the absence of physical barrier separation of dirty from clean areas, the current arrangement does not provide for sufficient compensatory measures such as adequate spatial separation, modified work practices and appropriate airflow characteristics.

Chapter: Environment of Care

Program: Hospital Accreditation

Standard: EC.02.05.09 ESC 45 days

Standard Text: The hospital inspects, tests, and maintains medical gas and vacuum systems. Note: This standard does not require hospitals to have the medical gas and vacuum systems discussed below. However, if a hospital has these types of systems, then the following inspection, testing, and maintenance requirements apply.

Primary Priority Focus Area: Physical Environment

Element(s) of Performance:

1. In time frames defined by the hospital, the hospital inspects, tests, and maintains critical components of piped medical gas systems, including master signal panels, area alarms, automatic pressure switches, shutoff valves, flexible connectors, and outlets. These activities are documented. (See also EC.02.05.01, EP 3)

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 1
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site. Inside of the main Security Office, the Main Medical Gas Alarm panel had been turned off. Once turned back on, it functioned appropriately. Another Main Med Gas panel was located in the Engineering Office which is manned 24/7 also.

Chapter: Infection Prevention and Control

Program: Hospital Accreditation

Standard: IC.02.02.01 ESC 45 days

Standard Text: The hospital reduces the risk of infections associated with medical equipment, devices, and supplies.

Primary Priority Focus Area: Infection Control

Element(s) of Performance:

1. The hospital implements infection prevention and control activities when doing the following: Cleaning and performing low-level disinfection of medical equipment, devices, and supplies. * 3
Note: Low-level disinfection is used for items such as stethoscopes and blood glucose meters. Additional cleaning and disinfecting is required for medical equipment, devices, and supplies used by patients who are isolated as part of implementing transmission-based precautions.
Footnote *: For further information regarding cleaning and performing low-level disinfection of medical equipment, devices, and supplies, refer to the Web site of the Centers for Disease Control and Prevention (CDC) at http://www.cdc.gov/ncidod/dhqp/sterile.html (Sterilization and Disinfection in Healthcare Settings).

Scoring Category : C
Score : Insufficient Compliance

2. The hospital implements infection prevention and control activities when doing the following: Performing intermediate and high-level disinfection and sterilization of medical equipment, devices, and supplies. * (See also EC.02.04.03, EP 4) 3
Note: Sterilization is used for items such as implants and surgical instruments. High-level disinfection may also be used if sterilization is not possible, as is the case with flexible endoscopes.
Footnote *: For further information regarding performing intermediate and high-level disinfection of medical equipment, devices, and supplies, refer to the Web site of the Centers for Disease Control and Prevention (CDC) at http://www.cdc.gov/hicpac/Disinfection_Sterilization/acknowledg.html (Sterilization and Disinfection in Healthcare Settings).

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 1
§482.42 - (A-0747) - §482.42 Condition of Participation: Condition of Participation: Infection Control
This Condition is NOT MET as evidenced by:
Observed in Tracer Activities at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
When conducting tracer activities in the neonatal intensive care unit, a mattress was found to be tattered & torn. As such, the hospital potentially exposed its infants to device-transmitted infections as the disruptions in the fabric of this mattress made it impossible to terminally clean the mattress between patients.

Observed in Tracer Activities at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
When conducting tracer activities in the neonatal intensive care unit, a SECOND mattress was found to be tattered & torn. As such, the hospital potentially exposed its infants to device-transmitted infections as the disruptions in the fabric of this mattress made it impossible to terminally clean the mattress between patients.

Observed in Tracer Activities at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
When conducting tracer activities in the neonatal intensive care unit, a THIRD mattress was found to be tattered & torn. As such, the hospital potentially exposed its infants to device-transmitted infections as the disruptions in the fabric of this mattress made it impossible to terminally clean the mattress between patients.

EP 2
§482.51 - (A-0940) - §482.51 Condition of Participation: Condition of Participation: Surgical Services
This Condition is NOT MET as evidenced by:
Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the process for flash sterilization revealed that when this process was required, the contaminated instrument was washed in the sink used by staff to scrub in preparation for surgery. Contaminated instruments must be cleaned in an area designated for that purpose using equipment and cleaning reagents appropriate for this process.

Chapter: Leadership

Program: Hospital Accreditation

Standard: LD.01.03.01 ESC 60 days

Standard Text: The governing body is ultimately accountable for the safety and quality of care, treatment, and services.

Primary Priority Focus Area: Organizational Structure

Element(s) of Performance:

2. The governing body provides for organization management and planning. 

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 2
§482.12 - (A-0043) - §482.12 Condition of Participation: Condition of Participation: Governing Body
This Condition is NOT MET as evidenced by:
Observed in Leadership Session at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
The governing body/leadership did not ensure that the following Conditions of Participation were met as determined through observations, documentation, and staff interviews: 482.42/IC.02.02.01 - EP1: torn mattresses in the neonatal intensive care unit; 482.51/IC.02.02.01- EP2: cleaning surgical instruments in areas not designated for that purpose; EC.02.05.01 - EP6: Incorrect airflow/pressure relationships in operating and central sterilization rooms, insufficient separation of clean from dirty areas in endoscopy disinfection rooms, and deficiencies in obtaining procedural and anesthesia consents.

Chapter: Life Safety

Program: Hospital Accreditation

Standard: LS.02.01.20 ESC 60 days

Standard Text: The hospital maintains the integrity of the means of egress.

Primary Priority Focus Area: Physical Environment

Element(s) of Performance:

12. The corridor width is not obstructed by wall projections. (For full text and any exceptions, refer to NFPA 101-2000: 18/19.2.3.3) 4 OCO
Note: When corridors are 6 feet wide or more, The Joint Commission permits certain objects to project into the corridor, such as hand rub dispensers or computer desks that are retractable. They must be no more than 36 inches wide and cannot project more than 6 inches into the corridor. These items must be installed at least 48 inches apart and above the handrail height. (For full text and any exceptions, refer to: NFPA 101-2000: 18/19.2.3.3)

Scoring Category : C
Score : Insufficient Compliance

Observation(s):

EP 12
§482.41(b)(1)(i) - (A-0710) - (i) The hospital must meet the applicable provisions of the 2000 edition of the Life Safety Code of the National Fire Protection Association. The Director of the Office of the Federal Register has approved the NFPA 101®2000 edition of the Life Safety Code, issued January 14, 2000, for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy of the Code is available for inspection at the CMS Information Resource Center, 7500 Security Boulevard, Baltimore, MD or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Copies may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269. If any changes in this edition of the Code are incorporated by reference, CMS will publish notice in the Federal Register to announce the changes.
This Standard is NOT MET as evidenced by:
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
On the 12th floor across from the nurses station, one wooden box for customer comments was in the egress corridor. The box extended into the corridor approximately eight inches. This was removed during survey.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At the Recovery Department on three south, the patient information television projected more than 6" into the egress corridor.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At the EVR Department near room # 16, the patient record box/mail box projected greater than 6" into the egress corridor.

Chapter:	Life Safety
Program:	Hospital Accreditation
Standard:	LS.02.01.30 ESC 60 days
Standard Text:	The hospital provides and maintains building features to protect individuals from the hazards of fire and smoke.
Primary Priority Focus Area:	Physical Environment

Element(s) of Performance:

11. Corridor doors are fitted with positive latching hardware, are arranged to restrict the movement of smoke, and are hinged so that they swing. The gap between meeting edges of door pairs is no wider than 1/8 inch, and undercuts are no larger than 1 inch. Roller latches are not acceptable.
Note: For existing doors, it is acceptable to use a device that keeps the door closed when a force of 5 foot-pounds are applied to the edge of the door. (For full text and any exceptions, refer to NFPA 101-2000: 18/19.3.6.3.2, 18/19.3.6.3.1, and 7.2.1.4.1)

OCO

Scoring Category : C
Score : Insufficient Compliance

23. Doors in smoke barriers are self-closing or automatic-closing, constructed of 1 3/4-inch or thicker solid bonded wood core or equivalent, and fitted to resist the passage of smoke. The gap between meeting edges of door pairs is no wider than 1/8 inch, and undercuts are no larger than 3/4 inch. Doors do not have nonrated protective plates more than 48 inches above the bottom of the door. (For full text and any exceptions, refer to NFPA 101-2000: 18/19.3.7.5, 18/19.3.7.6, and 8.3.4.1)

Scoring Category : C
Score : Insufficient Compliance

Observation(s):

EP 11
§482.41(b)(1)(i) - (A-0710) - (i) The hospital must meet the applicable provisions of the 2000 edition of the Life Safety Code of the National Fire Protection Association. The Director of the Office of the Federal Register has approved the NFPA 101®2000 edition of the Life Safety Code, issued January 14, 2000, for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy of the Code is available for inspection at the CMS Information Resource Center, 7500 Security Boulevard, Baltimore, MD or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Copies may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269. If any changes in this edition of the Code are incorporated by reference, CMS will publish notice in the Federal Register to announce the changes.
This Standard is NOT MET as evidenced by:
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At the Recovery Department corridor on the third floor, the corridor door latches for both doors entering Recovery were not functioning. Both latches were corrected during survey.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At room 389 and 390 in the Heart Hospital building, the doors to the patient rooms had greater than 1/8" gap at the wing door and regular patient room door. This was corrected during survey.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Inside of the main Surgery Department, OR room # 23, and room # 24 had gaps larger than 1/8" at the meeting edges where the wing door met the main entrance door to the rooms.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At smoke compartment 2.3, the patient room doors (6 total) were not equipped with positive latching hardware. This area was not designated as a suite on the life safety drawings.

EP 23
§482.41(b)(1)(i) - (A-0710) - (i) The hospital must meet the applicable provisions of the 2000 edition of the Life Safety Code of the National Fire Protection Association. The Director of the Office of the Federal Register has approved the NFPA 101®2000 edition of the Life Safety Code, issued January 14, 2000, for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy of the Code is available for inspection at the CMS Information Resource Center, 7500 Security Boulevard, Baltimore, MD or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Copies may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269. If any changes in this edition of the Code are incorporated by reference, CMS will publish notice in the Federal Register to announce the changes.
This Standard is NOT MET as evidenced by:
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
The smoke barrier doors at OR # 14 did not latch when tested. This was corrected during survey.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At the entrance to the Heart Hospital on the third floor, the gap between the smoke barrier doors was greater than 1/8". This was corrected during survey.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
The smoke barrier doors on the second floor at the Vascular Access Coordinator's office had a gap at the meeting

edges larger than 1/8".

Chapter: Life Safety

Program: Hospital Accreditation

Standard: LS.02.01.35 ESC 60 days

Standard Text: The hospital provides and maintains systems for extinguishing fires.

Primary Priority Focus Area: Physical Environment

Element(s) of Performance:

4. Piping for approved automatic sprinkler systems is not used to support any other item. (For full text and any exceptions, refer to NFPA 25-1998: 2-2.2) 

Scoring Category : C
Score : Insufficient Compliance

Observation(s):

EP 4
§482.41(b)(1)(i) - (A-0710) - (i) The hospital must meet the applicable provisions of the 2000 edition of the Life Safety Code of the National Fire Protection Association. The Director of the Office of the Federal Register has approved the NFPA 101®2000 edition of the Life Safety Code, issued January 14, 2000, for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy of the Code is available for inspection at the CMS Information Resource Center, 7500 Security Boulevard, Baltimore, MD or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Copies may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269. If any changes in this edition of the Code are incorporated by reference, CMS will publish notice in the Federal Register to announce the changes.
This Standard is NOT MET as evidenced by:
Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
On the 11th floor inside the Clean Utility Room, the ceiling grid wiring was attached to the fire sprinkler piping. This was removed during survey.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Inside the 10th floor electrical room, a 3/4 inch conduit was attached to the sprinkler pipe with wire at three locations.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
At room 1028, low voltage wires were attached to the fire sprinkler pipe.

Observed in Building Tour at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
On the 9th floor at the electrical room, low voltage cabling was attached to the fire sprinkler piping.

Chapter: Medical Staff

Program: Hospital Accreditation

Standard: MS.01.01.01 ESC 60 days

Standard Text: Medical staff bylaws address self-governance and accountability to the governing body.

Primary Priority Focus Area: Credentialed Practitioners

Element(s) of Performance:

3. Every requirement set forth in Elements of Performance 12 through 36 is in the medical staff bylaws. These requirements may have associated details, some of which may be extensive; such details may reside in the medical staff bylaws, rules and regulations, or policies. The organized medical staff adopts what constitutes the associated details, where they reside, and whether their adoption can be delegated. Adoption of associated details that reside in medical staff bylaws cannot be delegated. For those Elements of Performance 12 through 36 that require a process, the medical staff bylaws include at a minimum the basic steps, as determined by the organized medical staff and approved by the governing body, required for implementation of the requirement. The organized medical staff submits its proposals to the governing body for action. Proposals become effective only upon governing body approval. (See the 'Leadership' (LD) chapter for requirements regarding the governing body's authority and conflict management processes.)
Note: If an organization is found to be out of compliance with this Element of Performance, the citation will occur at the appropriate Element(s) of Performance 12 through 36.

Scoring Category : A
Score : Insufficient Compliance

16. For hospitals that use Joint Commission accreditation for deemed status purposes: The medical staff bylaws include the following requirements, in accordance with Element of Performance 3: The requirements for completing and documenting medical histories and physical examinations. The medical history and physical examination are completed and documented by a physician, an oralmaxillofacial surgeon, or other qualified licensed individual in accordance with state law and hospital policy. (For more information on performing the medical history and physical examination, refer to MS.03.01.01, EPs 6-11.)
Note 1: The definition of 'physician' is the same as that used by the Centers for Medicare & Medicaid Services (CMS) (refer to the Glossary).
Note 2: The requirements referred to in this element of performance are, at a minimum, those described in the element of performance and Standard PC.01.02.03, EPs 4 and 5.

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 3
§482.12(a)(3) - (A-0047) - [The governing body must:]

(3) Assure that the medical staff has bylaws;
This Standard is NOT MET as evidenced by:
Observed in Medical Management Session at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Review of the medical staff bylaws revealed that documentation of the requirements of EP 16 into the bylaws had not been completed by the organized medical staff and approved by the governing body.

EP 16
§482.22(c)(5)(i) - (A-0358) - (i) A medical history and physical examination be completed and documented for each patient no more than 30 days before or 24 hours after admission or registration, but prior to surgery or a procedure requiring anesthesia services. The medical history and physical examination must be completed and documented by a physician (as defined in section 1861(r) of the Act), an oromaxillofacial surgeon, or other qualified licensed individual in accordance with State law and hospital policy.
This Standard is NOT MET as evidenced by:
Observed in Medical Management Session at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Review of the current language of the bylaws regarding medical histories and physical exams revealed that the bylaws did not sufficiently address who may do a history and physical or the timeframe requirments for completing the history and physical and updates. It also did not address basic information regarding any distinctions between inpatient and outpatient exams or any requirements for countersignatures.

Chapter: Medication Management

Program: Hospital Accreditation

Standard: MM.04.01.01 ESC 45 days

Standard Text: Medication orders are clear and accurate.

Primary Priority Focus Area: Medication Management

Element(s) of Performance:

13. The hospital implements its policies for medication orders. 3

Scoring Category : C
Score : Partial Compliance

Observation(s):

EP 13
§482.23(c)(2) - (A-0406) - (2) With the exception of influenza and pneumococcal polysaccharide vaccines, which may be administered per physician-approved hospital policy after an assessment of contraindications, orders for drugs and biologicals must be documented and signed by a practitioner who is authorized to write orders by hospital policy and in accordance with State law, and who is responsible for the care of the patient as specified under §482.12(c).
This Standard is NOT MET as evidenced by:
Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of medication orders revealed a titration order for Fentanyl IV 2.5 mg/100 ml; titrate, Ramsey 3. This order does not include the "titration schedule" as required by hospital policy.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the medication ordering process revealed that the hospital used a standing order for pre-operative IVs. Hospital policy required that after standing orders were implemented, they were to be authenticated by the physician. Discussion with staff revealed that currently the actual standing order pre-printed form was not included in the medical record and that therefore physicians were not authenticating these orders as hospital policy required.

Chapter: Medication Management

Program: Hospital Accreditation

Standard: MM.05.01.01 ESC 60 days

Standard Text: A pharmacist reviews the appropriateness of all medication orders for medications to be dispensed in the hospital.

Primary Priority Focus Area: Medication Management

Element(s) of Performance:

1. Before dispensing or removing medications from floor stock or from an automated storage and distribution device, a pharmacist reviews all medication orders or prescriptions unless a licensed independent practitioner controls the ordering, preparation, and administration of the medication or when a delay would harm the patient in an urgent situation (including sudden changes in a patient's clinical status), in accordance with law and regulation. 4

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 1
§482.25(b) - (A-0500) - §482.25(b) Standard: Delivery of Services

In order to provide patient safety, drugs and biologicals must be controlled and distributed in accordance with applicable standards of practice, consistent with Federal and State law.
This Standard is NOT MET as evidenced by:
Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the medical record revealed that the order for antibiotics in the pre-operative area had not been scanned to the pharmacy as required and that the antibiotics had been started without pharmacy review of orders.

Chapter: National Patient Safety Goals

Program: Hospital Accreditation

Standard: UP.01.03.01 ESC 45 days

Standard Text: A time-out is performed before the procedure.

Primary Priority Focus Area: Patient Safety

Element(s) of Performance:

4. During the time-out, the team members agree, at a minimum, on the following: 3
- Correct patient identity
- The correct site
- The procedure to be done

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 4
Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site.
During patient tracer activity, observation of a time-out revealed that the patient identification process did not include viewing the patient's armband as required by the hospital's patient identification policy.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site.
During patient tracer activity, observation of the time-out revealed that the specification of patient identity was limited to the medical record number and did not include patient name and birthdate as required by hospital policy.

Observed in Tracer Activities at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site.
The time out which was observed by the surveyor in the cardiac cath lab did not include positive patient identification. During the time out, the circulator stood at the foot of the bed and announced, "Time out. This is ...(patient's name) and we are doing a left heart cath. Does everybody agree?" The circulator did not compare any piece of paper, such as the consent form, against the armband. She also did not announce the patient's medical record number or date of birth as required by hospital policy. When the armband verification WAS verified (pre-procedurally & in another area), the physician was not present. At the actual time out being described, no staff member compared the medical record number of date of birth against any source document, such as the consent and/or armband. The hospital failed to follow its own policy for patient identification during the time out.

Chapter: Provision of Care, Treatment, and Services

Program: Hospital Accreditation

Standard: PC.01.02.09 ESC 45 days

Standard Text: The hospital assesses the patient who may be a victim of possible abuse and neglect.

Primary Priority Focus Area: Assessment and Care/Services

Element(s) of Performance:

4. The hospital uses its criteria to identify possible victims of abuse and neglect upon entry into the hospital and on an ongoing basis. 3

Scoring Category : A
Score : Insufficient Compliance

Observation(s):

EP 4
Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site.
During patient tracer activity in the Emergency room, review of the patient assessment process revealed no evidence that the patient had been screened for abuse. Subsequent discussion with staff revealed that although there was a formal process for screening for abuse and documenting the result for admitted patients, the Emergency department did not have a similar process in place.

Chapter: Rights and Responsibilities of the Individual

Program: Hospital Accreditation

Standard: RI.01.03.01 ESC 45 days

Standard Text: The hospital honors the patient's right to give or withhold informed consent.

Primary Priority Focus Area: Rights & Ethics

Element(s) of Performance:

11. The informed consent process includes a discussion about reasonable alternatives to the patient's proposed care, treatment, and services. The discussion encompasses risks, benefits, and side effects related to the alternatives and the risks related to not receiving the proposed care, treatment, and services. 3

Scoring Category : A
Score : Insufficient Compliance

13. Informed consent is obtained in accordance with the hospital's policy and processes and, except in emergencies, prior to surgery. (See also RC.02.01.01, EP 4) 4

Scoring Category : C
Score : Insufficient Compliance

Observation(s):

EP 11
§482.51(b)(2) - (A-0955) - (2) A properly executed informed consent form for the operation must be in the patient's chart before surgery, except in emergencies.
This Standard is NOT MET as evidenced by:
Observed in Tracer Activities at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
The surgical consent form for a patient in Labor & Delivery had no documented risks of NOT performing the planned surgical procedure. This is not included in the template nor was it found in any progress notes. The hospital has a new surgical consent form which is now with the Forms Committee which DOES contain this information; however, this particular record was lacking that information.

Observed in Tracer Activities at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
The surgery consent for a patient who received a coronary artery bypass surgery did not include risks related to not receiving the proposed surgery.

EP 13
§482.51(b)(2) - (A-0955) - (2) A properly executed informed consent form for the operation must be in the patient's chart before surgery, except in emergencies.
This Standard is NOT MET as evidenced by:
Observed in Breast Center at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
The patient was having a Stereotactic Breast Biopsy. The witness to the consent for the procedure was noted by three initials. Hospital policy requires the name of the person witnessing the consent.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the medical record revealed that there was no procedural or sedation consent form obtained for a patient who had a non emergent chest tube inserted.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
During patient tracer activity, review of the consenting process for anesthesia revealed that the patient had signed the consent form, which covered both the procedure itself and anesthesia, before the anesthesiologist had spoken to the patient. Hospital policy required that the patient should not sign the consent form until all of their questions had been answered by the provider of care.

Observed in Individual Tracer at The University of Tennessee Memorial Hospital (1924 Alcoa Highway, Knoxville, TN) site for the Hospital deemed service.
Review of a second medical record revealed that the patient had signed the consent form, which covered both the procedure itself and anesthesia, before the anesthesiologist had spoken to the patient. Hospital policy required that the patient should not sign the consent form until all of their questions had been answered by the provider of care.

The Joint Commission

December 15, 2011

Re: # 7853
CCN: #440015
Program: Hospital
Accreditation Expiration Date: December 24, 2014

Joe Landsman
CEO
The University of Tennessee Memorial Hospital
1924 Alcoa Highway, Box 25
Knoxville, Tennessee 37920

Dear Mr. Landsman:

This letter confirms that your September 19, 2011 - September 23, 2011 unannounced full resurvey was conducted for the purposes of assessing compliance with the Medicare conditions for hospitals through The Joint Commission's deemed status survey process.

Based upon the submission of your evidence of standards compliance on November 18, 2011 and November 29, 2011 and the successful on-site Medicare Deficiency Follow-up event conducted on November 03, 2011, the areas of deficiency listed below have been removed. The Joint Commission is granting your organization an accreditation decision of Accredited with an effective date of September 24, 2011. We congratulate you on your effective resolution of these deficiencies.

§482.12 Condition of Participation: Governing Body
§482.22 Condition of Participation: Medical staff
§482.23 Condition of Participation: Nursing Services
§482.25 Condition of Participation: Pharmaceutical Services
§482.41 Condition of Participation: Physical Environment
§482.42 Condition of Participation: Infection Control
§482.51 Condition of Participation: Surgical Services

The Joint Commission is also recommending your organization for continued Medicare certification effective September 24, 2011. Please note that the Centers for Medicare and Medicaid Services (CMS) Regional Office (RO) makes the final determination regarding your Medicare participation and the effective date of participation in accordance with the regulations at 42 CFR 489.13. Your organization is encouraged to share a copy of this Medicare recommendation letter with your State Survey Agency.

This recommendation also applies to the following location(s):

The University of Tennessee Memorial Hospital
1924 Alcoa Highway, Knoxville, TN, 37920

University Cancer Specialists

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

The Joint Commission

908 West Fourth North Street, Morristown, TN, 37814

UT Medical Center/Rehab @ Halls
4005 Fountain Valley Dr. Suite 400, Knoxville, TN, 37918

UT Medical Center/Rehab @ Hardin Valley
2587 Willow Point Way, Knoxville, TN, 37932

UT Medical Center/Rehab @ Northshore
9625 Kroger Park Dr. Suite 100, Knoxville, TN, 37922

UT Medical Center/Rehab @ Seymour
11546 Chapman Highway, Seymour, TN, 37865

UT Outpatient Diagnostic Center at Turkey Creek
11440 Parkside Drive, Ste 204 Plaza 2, Knoxville, TN, 37934

UT Physical Therapy, Loudon Clinic
2480 Highway 72 N, Loudon, TN, 37774

UT Sleep Center
420 W. Morris Blvd, Suite 400-H, Morristown, TN, 37813

We direct your attention to some important Joint Commission policies. First, your Medicare report is publicly accessible as required by the Joint Commission's agreement with the Centers for Medicare and Medicaid Services. Second, Joint Commission policy requires that you inform us of any changes in the name or ownership of your organization, or health care services you provide.

Sincerely,

Ann Scott Blouin RN, PhD

Ann Scott Blouin, RN, Ph.D.
Executive Vice President
Accreditation and Certification Operations

cc: CMS/Central Office/Survey & Certification Group/Division of Acute Care Services
CMS/Regional Office 4 /Survey and Certification Staff

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

SUPPLEMENTAL

SUPPLEMENTAL RESPONSES

CERTIFICATE OF NEED APPLICATION

FOR

UNIVERSITY OF TENNESSEE MEDICAL CENTER

Hospital Expansion and Renovation, and the Addition of 44 Acute Care Beds

Knox County, Tennessee

Project No. CN1409-042

September 29, 2014

Contact Person:

Jerry W. Taylor, Esq.
Stites & Harbison, PLLC
401 Commerce Street, Suite 800
Nashville, Tennessee 37219
615-782-2228

1. **Section B. Project Description, Item I (Executive Summary).**

   The executive summary is noted. Under the section heading Existing Resources, please include a brief description of the project's impact on the other hospitals in the twenty-one (21) county service area.

   The following is an addition to the "Existing Resources" section of the Executive Summary, on page 8 of the application.

   Existing Resources

   This project should have no significant negative impact on existing hospitals in the service area. UTMC is a regional referral hospital for the 21 county service area and accordingly, routinely receives patient referrals from these hospitals whenever they determine that the patient in their facility could benefit from a higher level of care or is in need of a unique medical service only available at UTMC. The UTMC is not considered a feeder hospital for these other facilities in the region and rarely transfers a patient to another hospital in the 21 county service area unless requested by the patient or for one of a few services not available at UTMC (example being psychiatric care not available at UTMC).

   In recent years due to capacity issues, UTMC has been forced to decline or delay acceptance of requested patient transfers from hospital providers in the 21 county service area. Unfortunately, when this occurs the outlying facility finds itself in a situation of providing care to a patient for a medical condition for which it is ill equipped from a medical expertise or staffing/facility standpoint. In these cases, UTMC Specialist Physicians often consult with the local medical provider to offer suggestions and alternatives in care. In many cases the best solution is to seek another regional referral hospital to accept the patient and provide the needed medical services, usually at a great distance from the patient's home and away from friends and family

   Given the frequency in which capacity issues are encountered at UTMC and the negative impact of that on hospital providers in the service area, UTMC believes that most of the medical providers in the 21 county service area will benefit from the additional beds at UTMC and the increased capacity to accept those patients requiring the higher level or unique services offered at the regional referral center.

2. **Section B. Project Description, Item II.A.**

   The square footage and cost per square footage chart is noted. Please revise the chart by providing amounts at the bottom of the chart in the appropriate columns and submit a replacement page 12 with your response.

   A revised Square Footage and Cost Per Square Foot Chart is attached following this response.

SQUARE FOOTAGE AND COST PER SQUARE FOOTAGE CHART

A. Unit / Department	Existing Location	Existing SF	Temporary Location	Proposed Final Location	Proposed Final Square Footage			Proposed Final Cost/ SF		
					Renovated	New	Total	Renovated	New	Total
NICU	3rd Floor	26,851	NA	3rd Floor	15,432	9,758	25,190	$200	$336.45	$6,369,256
New ICU	NA	NA	NA	4th Floor	1,262	16,850	18,112	$200.10	$345.74	$6,078,248
6 South	NA	NA	NA	6 South	12,000		12,000	$298.67		$3,584,000
B. Unit/Depart. GSF Sub-Total										
C. Mechanical/ Electrical GSF	Included above									
D. Circulation /Structure GSF	Included above									
E. Total GSF					28,694	26,608	55,302	$241.27	$342.32	$13,031,504

Please also complete the table below to identify uses of existing areas that may be impacted by the project.

Service	Floor	Description of proposed Changes (# licensed beds before/after)	Use of Space Currently	Future Location of Displaced Activities (as applicable)	Total Square Feet of New Construction or renovation Proposed
NICU	3	Addition; larger space; walled rooms (67/67)	N/A. New space	N/A. New space	25,190 s.f. (new & renovation)
ICU	4	New ICU (80/96)	N/A. New space	N/A. New space	18,112 s.f. (new & renovation)
Med-Surg	6	Convert physician clinic space to inpatient wing (422/450)	Physician Clinics	MOB	12,000 s.f. (renovation)

3. **Section B, Project Description, Item II.B (bed complement changes)**

The proposed addition of 44 licensed beds resulting in an increase from 581 to 625 total licensed beds is noted. Review of Schedule F of the applicant's 2012 JAR revealed 315 Med/Surg beds of 534 total staffed beds in 2012 increasing to 325 Med/Surg beds of 546 total staffed beds in 2013. There are 390 staffed Med/Surg beds shown on the Bed Complement table on page 4. Please briefly describe the changes in staffed Med/Surg beds leading to the significant increase in staffed beds from 2013 to present (65 additional set up and staffed beds).

The change in bed complement as described above is due solely to the formatting of the JAR data request for Schedule F and the format of the HSDA Bed Complement Data form. The JAR Schedule F has a separate line breakout for reporting OB/GYN and Orthopedic staffed bed numbers. This was reported by UTMC in the 2013 JAR as 30 staffed beds in each category, a total of 60 staffed beds. When completing the HSDA application, there is no separate breakout for either OB/GYN or Orthopedic staffed beds, so the 60 staffed beds in these units were combined in the reported Medical/Surgical category. In addition, we have brought 5 additional beds back on-line in space that had been previously vacated. This explains the variance between the JAR reported data of 325 medical/surgical beds and the 390 beds as shown on the bed complement data form.

4. **Section B. Project Description, Item B. – Changes to Bed Complement**

The bed complement data chart reflects 581 licensed and 549 total staffed beds. What percentages of beds are private and semi-private – before and after the project?

Please see the table below.

Clinical Area	Current Licensed Beds Private	Current Licensed Beds Semi-Private	Total
Medical - Surgical	422		422*
Obstetrical	12		12
ICCU/CCU	80		80
Neonatal	23	44*	67
Total	537	44	581
% of Total	92.4%	7.6%	
Clinical Area	**Proposed Licensed Beds Private**	**Proposed Licensed Beds Semi-Private**	**Total**
Medical-Surgical	450		450
Obstetrical	12		12
ICCU/CCU	96		96
Neonatal	49	18**	67
Total	607	18	625
% of Total	97%	3%	

* 18 of these beds are in 9 neonatal "twin rooms" intended for use by neonatal twins. The other 26 are neonatal beds in the open floor unit.

** The 18 neonatal twin rooms will be retained.

Please also include a description of how this project relates to Phase 1 of renovation to the NICU completed in 2007 (see pages 10 and 26).

This application includes Phase II of the NICU expansion project. Phase I was completed in 2007. Prior to that expansion and renovation, all but 18 of the 67 licensed NICU beds were in an open floor model (no dividing walls between the beds). Phase I was internal renovation and expansion only, and put 23 of the beds formerly on the "open floor" unit into separately walled private rooms. That project did not require a CON because no new beds were added, and the total cost was below $5 million.

Phase II will put the remaining 26 open floor NICU beds in separately walled rooms. (There will still be at total of 18 NICU beds in 9 "twin rooms" that are used for twin births). There will be no more open floor room beds. Since building codes have changed since the last NICU renovation to require more square footage per bed, it is necessary to build an addition out the side of the current building on the 3rd floor of the North Pavilion

to extend out over the roof of the 2nd floor. This will complete the renovation/expansion of the NICU. No new NICU beds are being requested.

5. **Section C, Need. Item 1 (Project Specific Criteria)**

Acute Care Bed Need, Item 1:
The applicant's acknowledgement of the 1,250 acute care bed surplus in the PSA is noted. Review of the results revealed no estimate as to a surplus or shortage for Fentress County, and a service area population that is approximately 100,000 residents higher using updated TDH population statistics. Do any of these factors significantly affect the surplus for CY2014 in the PSA?

The applicant does not know the reason Fentress County is not included in the Acute Bed Need calculations. Whether that omission and/or the population discrepancy referenced has any significant impact on the area wide bed surplus would be speculation. Even if it were to increase or decrease the bed surplus, that has no bearing on UTMC's need for additional capacity.

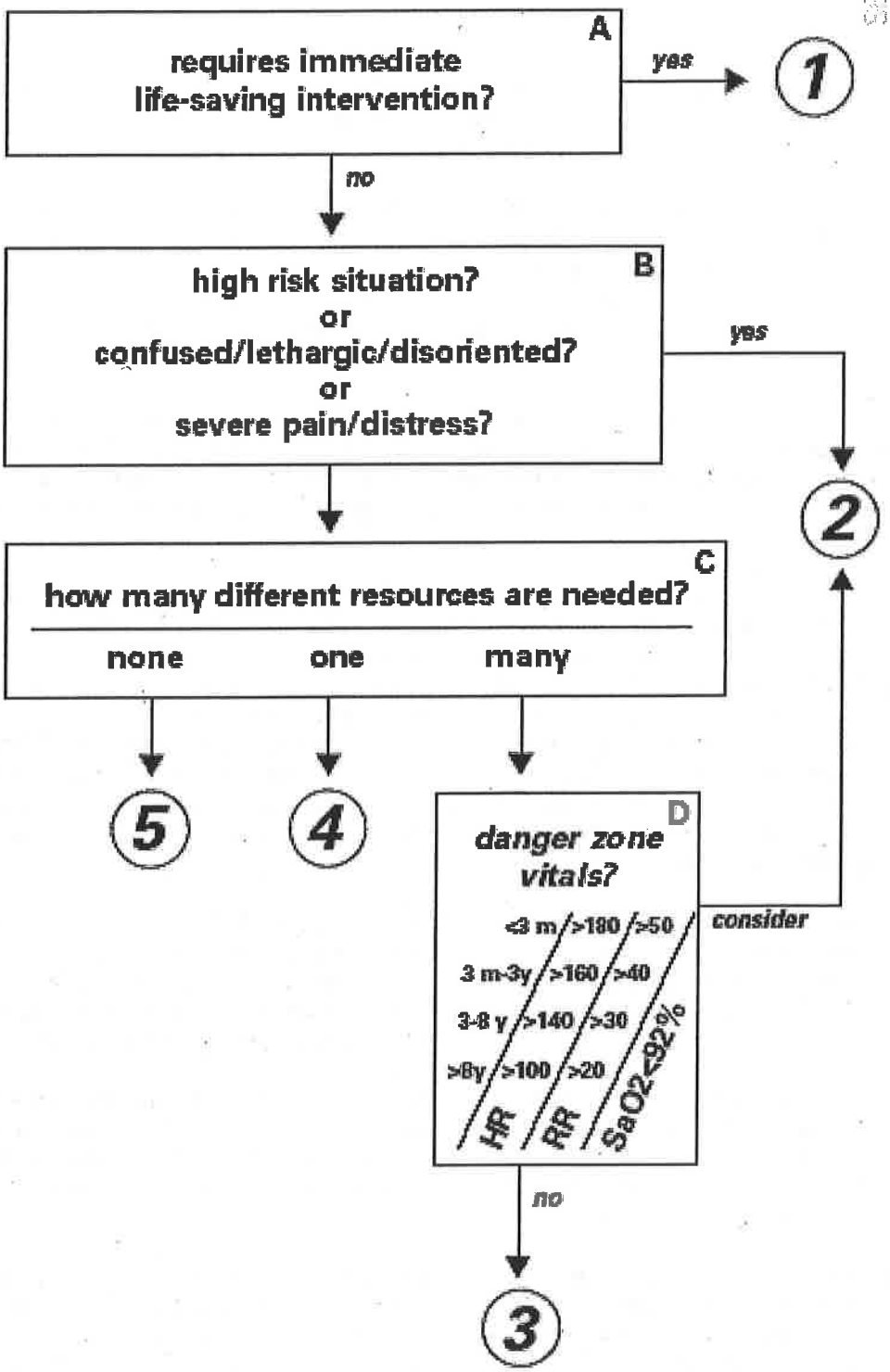
There is one hospital in Fentress County, Jamestown Regional Medical Center, which has 85 licensed beds. According to the DOH, it had a licensed average occupancy of 17.5% in 2012, so obviously there are beds available at that facility. But Jamestown Regional is located approximately 104 miles and 1 hour, 45 minutes' drive time from UTMC. It is unlikely there would be any transfers from UTMC to that facility. The calculated bed surplus in the service area has no impact on the need for additional beds at UTMC.

The number of staffed Med/Surg beds shown by unit in the attachment (C, Need, Item 1 -Chart 2) totals to 332 beds compared to 325 staffed beds in the 2013 JAR. As a result, is the occupancy slightly understated in the table? Please clarify.

The number of staffed beds reflected on the JAR is a snapshot as of the end of the reporting period. Throughout any given year, the number of staffed beds may fluctuate as some beds have to be closed temporarily due to minor renovations and relocations of beds within the facility, and as bed designations are changed to meet the most pressing needs. The number of staffed med-surg beds and the resulting occupancies reflected on the referenced chart are correct.

Please briefly describe the acuity levels in the table showing historical/projected ED visits on page 20.

UTMC categorizes patient acuity in a five tier system from the Emergency Severity Index. This system is based on the latest medical evidence. Acuity level 1 are patients that present that need immediate medical intervention, examples include: cardiac arrest, respiratory arrest, or unstable trauma or stroke patient. Level 2 acuity are patients that need urgent medical intervention, within 30 minutes of arrival examples include: a patient that is hypertensive with symptoms, chest pain, unstable vital signs, severe abdominal patient with intractable vomiting. Level 3 patients need medical intervention within an hour, examples include: kidney stone, abdominal pain, stable vaginal bleeding, stable fracture. Level 4 patients are patients that could be treated in other environments such as an urgent care or primary care physician. Level 5 patients are those that need medication refill or medical screening exam. Attached following this response is the algorithm utilized in determining patient acuity.



UTMC'S role as an academic medical center is noted. What was the growth in the physician residents from 2012 to present as related to the increase in patient caseloads at the hospital during the period?

In the 2012-2013 academic year, there were 200 medical and dental residents at the University of Tennessee Medical Center. In 2013-2014 that number increased to 210 and for the 2014-2015 academic year, the total number of medical and dental residents will increase again to 215. These additional residents have been primarily in medicine, surgery, and oral maxillofacial surgery and would correspond with the increased demand in acute care, critical care, and trauma.

The description of the applicant's use of the Poisson Probability bed need formula as a way to predict UTMC patient caseloads is noted. What sources from medical literature are available for additional insight into the model? What is the applicant's experience in using the model in terms of the accuracy/reliability of its projections in prior projects?

Due to its statistical foundation, the Poisson Probability bed need formula is cited more often in industrial engineering and operations research literature than in medical literature. It is a much more sophisticated methodology than simply dividing projected average daily census (ADC) by a target occupancy rate (e.g., 70% or 80%). This occupancy approach depends upon a hospital-wide midnight census which does not account for daily admissions and discharges, nor does it allow for any variability in the size of the census. For example, a 500 bed hospital operating at 70% occupancy will have an average of 150 empty beds throughout the year (500 x 30% = 150). These 150 empty beds are equivalent to the size of an entire community hospital, and the facility will not operate efficiently.

At the other extreme are very complicated regression models and simulation models which require weekly or daily census data by individual nursing unit. These models can account for real time patient fluctuations and can be used to project staffing levels for the following week at the nursing unit level. However, the detailed inputs do not make them practical for health planning purposes, especially across a region or entire state.

As compared to regression and simulation models, the Poisson model requires only admissions and length of stay data to estimate optimal bed requirements. In fact, as presented in the original CON application, it can be simplified even further and calculated on ADC alone. (Annual Admissions x Average Length of Stay = Patient Days; Patient Days ÷ 365 = ADC).

Although UTMC has not used the Poisson model before, several state CON agencies, including Tennessee, use some variation of Poisson. A web search found a split in the use of the Poisson and occupancy approaches among ten states in their state health plans and/or bed need regulations. Five states use Poisson probabilities exclusively or in combination with targeted occupancies – Tennessee, Oregon, Mississippi, New Hampshire and Virginia. Five other states use targeted occupancies only – Alaska, Georgia, Maryland, New York and North Carolina. Compared to bed need projection methodologies used by the other states which use Poisson at 99% probability, UTMC's

projections using the Poisson probability method at 90% probability not only conform to reasonable health planning guidelines but also appear conservative.

Acute Care Bed Need, Item 2.c:
The request for special consideration is noted. What illustrations or visuals discussed in any other sections does the applicant wish to cite as references such that specific metrics can be appreciated in this regard?

In accordance with section 2(c) of the Acute Care Bed Need Services standards, "special consideration" should be afforded this application for the following reasons:

UTMC is a Specialty Health Service:

UTMC provides sub-specialty level services that are not provided by any other hospital in the 21 county service area. Its specialty services include:

- Area's only Academic Medical Center
- Area's only Level I Trauma Center
- Renal Transplant Center
- Regional Perinatal Center (Level II and III NICU)
- Pediatric Heart Program
- Hemophilia Center
- Adult Cystic Fibrosis Center
- LIFESTAR Aeromedical Program

The provision of these specialized services result in UTMC having a significantly higher Medicare Case Mix Index than the national average. Case Mix Index is a relative measure of patient acuity. As of August 31, 2014, UTMC has a Medicare Case Mix Index of 2.00. The national average Medicaid Case Mix Index is 1.52 based on 2013 data. Having such a high CMI value reflects the clinical complexity and resources needed for the patients cared for by UTMC, and further demonstrates the ability of UTMC to provide the highest level of care possible to the most critically ill and injured patients.

UTMC is a Tertiary Care Regional Referral Hospital

Significant numbers of referrals and admissions are received from the defined 21 county service area, and beyond. The following county of residence information is reported in the 2013 JAR:

Total UTMC Discharges:	24,958

Area:	No. of Discharges:	% of Total:
Knox Co.	9,316	37.3%
Contiguous counties (8)	8,352	33.5%
Non-contiguous service area counties (12)	5,396	21.6%
Outside service area	1,894	7.6%
Total:	24,958	100%

The admissions (discharges) pattern confirms UTMC's role as a tertiary regional referral hospital. Almost one-third (29.2%) of UTMC's patients reside outside of the home county and all contiguous counties. Another not-insignificant number of patients come from even beyond the 21 county service area.

Construction, Renovation, Item 3.a

The items impacting demand for the proposed project are noted. Please include a brief recap of the increases in bed occupancy, lack of available beds to accept referrals, etc., as it pertains to this question.

NICU Expansion: Of the 67 licensed NICU beds, 26 of those are currently housed on an open floor which has no dividing walls between the beds. There is also no external natural lighting available on this unit. While the highest level of care is obviously still provided on this unit, the private rooms, larger per bed space, and external lighting are all significant improvements in comfort and privacy for the infants and their families. There is no space available within the walls to provide these improvements, so the proposed addition is necessary.

This is the second phase of renovation to the NICU. The first phase was completed in February, 2007 and consisted of essentially the same changes – converting a multi-basinet, open floor unit to separately walled, mostly single rooms. This proposed second phase will complete the renovation and modernization of the 67 bed NICU. No beds are being added to the NICU, so no discussion of bed need or utilization is necessary.

ICU Expansion/Addition: UTMC currently has 80 ICU/CCU beds (75 adult and 5 pediatric). Occupancy on the ICU beds runs extremely high, and additional capacity is needed. UTMC intends to allocate 16 of the requested 44 additional acute care beds to ICU use. There is no physical space within the walls to house the beds, so the addition is necessary. The proposed addition of the NICU will extend out over what is now the roof of the 2nd floor, and the proposed ICU addition will be constructed on top of the NICU addition.

Considerations justifying the need for additional ICU beds, which are further discussed in more detailed throughout the application, include the following:

- In 2013, UTMC declined to accept for transfer 144 patients requiring adult intensive care treatment. In 2014, that number increased to 229 patients from January - August. If this continues that number could reach 344 by the end of the year.

- Of the patients declined transfer to UTMC, 16.2% of the patients this year were patients suffering a neurological injury/illness, and 40.6% suffered from an acute medical illness that exceeded the ability of the hospital currently providing care, necessitating transfer to a facility with more resources in terms of equipment, training and specialized care providers.

- As of August 31, 2014, UTMC has a Medicare Case Mix Index of 2.00. The national average Medicaid Case Mix Index is 1.52 based on 2013 data. Having such a high CMI value reflects the clinical complexity and resources needed for the patients cared for by UTMC, and further demonstrates the need for additional ICU beds.

- Due to capacity constraints and a record volume of requests for transfers to UTMC ICUs from the region, the hospital has been on critical (intensive) care hold 114 of the 243 days elapsed January through August in 2014. The result is an increase in the average number of days being on critical (intensive) care unit hold of 9 per month in 2013 to 14 per month in 2014. Thus in 2014 ICU patients were declined for transfer to UTMC's ICU roughly 47% of the time.

- Requests for ICU patient transfers tend to come in clusters particularly when UTMC is on critical (intensive) care hold. As many as 8 patients in one 24 hour period have been refused for transfer to UTMC due to all intensive care units being full to capacity. UTMC aims to maintain a goal occupancy rate of 70% - 80% to maintain maximal efficiency and effectiveness.

- August year-to-date 2014, there are multiple examples of between 10–14 patients requiring intensive care being unable to transfer to UTMC's ICU within a 3 consecutive day period. With an average ICU ALOS of 3.59 days, a 16 bed ICU would have an occupancy rate from 63% to 88%, while all other current ICUs would be running at 100% occupancy (on days the hospital is on critical (intensive) care unit hold).

The need for additional critical care beds at UTMC is also clearly evidenced by the historical utilization and occupancy of the existing critical care beds:

- As reflected on Attachment C, I, Need, 1, Chart 4 the adult critical care units occupancy rate averaged 78.3%, and exceeded 70% every month except for one. There is very little fluctuation in the occupancy – the beds are consistently highly utilized. And it is important to note that critical care beds, because they are distributed among smaller nursing units due to higher patient acuity, cannot be run at the 80% target threshold for all hospital bed types.

- As reflected on Attachment C, I, Need, 1, Chart 5 in 2013 all adult critical care units at UTMC averaged 95% or greater occupancy on 78 days during the year, and 90% or greater occupancy on 115 days during the year.

- As reflected on Attachment C, I, Need, 1, Chart 6 in 2013 the daily occupancy on all adult critical care units at UTMC exceeded 80% 183 days during the year, exceeded 85% on 104 days, exceeded 90% on 41 days, ,and exceeded 95% on 9 days.

- E.D. Hold hours increased from 92 average hold hours a day in 2009 to 235 average hold hours a day in 2014.

These occupancies are clearly unacceptable for critical care beds. By increasing adult intensive care bed capacity UTMC will be better able to serve the needs of the residents and visitors in the region.

Renovation/Conversion of 6th Floor South to Inpatient Rooms: UTMC proposes to allocate 28 of the requested 44 additional acute care beds to general medical/surgical use. These 28 new med/surg beds will be located on the 6th floor of the East Pavilion. This space is currently being used for non-inpatient care purposes. These existing uses will be relocated to existing space in a medical office building on the campus. The space will be renovated into 28 private inpatient rooms. This is a more cost effective approach than new construction, although specific cost estimates for new construction of roughly 12,000 square feet of new construction were not obtained.

The University of Tennessee Medical Center, the region's only academic medical center, serves as the regional referral center and sole Level I trauma center for a 21 county service area. The current number of medical-surgical beds is not adequate to provide care for all patients who are referred for acute care. Considerations justifying the need for additional Med-Surg beds, which are further discussed in more detailed throughout the application, include the following:

- As reflected on Attachment C, I, Need, 1, Chart 1 in 2013 the adult medical surgical occupancy rate averaged 89.1%, and exceeded 85% every month. There is very little fluctuation in the occupancy – the beds are consistently highly utilized.

- As reflected on Attachment C, I, Need, 1, Chart 2 in 2013 the 11 adult med-surg units at UTMC averaged 95% or greater occupancy 165 days during the year, and 90% or greater occupancy 232 days during the year.

- As reflected on Attachment C, I, Need, 1, Chart 3 in 2013 the adult med-surg units experienced a daily occupancy of 95% or greater occupancy 81 days during the year, and 80% or greater occupancy 325 days during the year.

Below are several additional contributing factors that necessitate additional medical-surgical, acute care beds to accommodate the current needs of the region:

- The number of referrals not accepted YTD July 2014 is 384. Of those, 229 were critical care patients, leaving 155 patients who needed an general medical surgical bed. If this trend continues there will be over 650 patients in 2014 who need the services of UTMC, but could not be served due to unavailability of beds.

- Emergency Room visits have increased from 64,500 in 2009 to over 85,000 in 2013. Over 40% of all patients who are treated in the emergency room require use of an acute care bed during the patient's stay. The lack of available beds leads to internal queuing and inefficiencies. E.D. Hold hours increased from 92 average hold hours a day in 2009 to 235 average hold hours a day in 2013.

These occupancies are clearly unacceptable for med-surg beds. By increasing adult med-surg bed capacity UTMC will be better able to serve the needs of the residents and visitors in the region.

The applicant states that the previous Phase 1 of renovation to the NICU was completed in 2007 and this proposal is Phase 2 for new construction of an addition to the NICU. The CON reference does not appear to be included with UTMC's list in the discussion provided on page 27 and 28 of the application. Please clarify.

Phase I was internal renovation and expansion only, and put 23 of the open floor unit beds into separately walled private rooms. That project did not require a CON because no new beds were added, and the total cost was below $5 million.

If the proposal is approved, it appears that there may be approximately 10 years between completion of Phase 1 and Phase 2. What impact, if any, does the interval have to keeping on track with UTMC's long range, multiple level construction activities focusing on physical plant improvement, modernization and expanded capacity?

Phase I of the renovation of NICU was completed in 2007 and was funded with a combination of hospital funds, private gift donations, and a substantial federal grant. Phase I of the renovation project did not meet the criteria or expenditure thresholds to require a CON. During the intervening years, the codes and requirements for certified and accredited neonatal intensive units changed significantly and required a major redesign of the size and scope of Phase II and the project now requires a CON. Also in the intervening years and because of the change in the size and scope of the project, additional internal funding was required and a major private gift campaign was successfully completed. At the conclusion of Phase II, the NICU will have been completely renovated and will meet all of the current codes and requirements for certification and accreditation.

6. Section C, Need, Item 5

The identification & discussion of the utilization for each hospital in the service area is noted in attachment C, Need, 5(1). The 136,604 inpatient days for UTMC differ from the 140,304 days in the Historical Data Chart (same amount in applicant's 2012 JAR). As a result, occupancy appears to be understated. Please clarify.

UTMC reported 140,304 Patient Days in Schedule G, Item 2 (Utilization by Major Diagnostic Categories) on its 2012 JAR. That is the same number reflected on the Historical Data Chart for 2012. The 136,304 that was taken from the DOH compilation is apparently taken from Schedule G, Item 5 (Patient Origin) which is reported in Discharge Days, rather than Patient Days.

Using the number of days reported on Schedule G, Item 2 of the JAR, the overall average licensed occupancy (not including observation days) for 2012 is 66.7%, as compared to the 64.4% reflected on the DOH data chart.

Please add a column to the attachment that shows the current number of licensed beds by TDH for each facility (please use TDH website to verify or applicant's toolbox link on the HSDA website). What changes, if any, have occurred to the licensed beds from what was reported in the 2012 JAR and the current status?

A revised table is attached following this response, which reflects the number of reported licensed beds for 2014 according to the Department of Health, Division of Health Care Facilities website. Those totals indicate an increase of 483 licensed beds from 2012-2014. The facilities showing a change in bed complement are reflected in bold type in the table. The applicant questions the accuracy of the resulting bed increase, and believes it to be a reporting or posting error. Pioneer Community Hospital in Scott County did put 25 previously inactive beds back into service in 2014 as Critical Access Hospital beds, but the applicant is not aware of any other actual net increases in beds in the service area.

Joint Annual Report of Hospitals Occupancy Rates 2012 Final & 2014 Licensed Beds

Name of Hospital	County	Licensed Beds	Staffed Beds	Inpatient Days	Licensed Beds		Staffed Beds		Licensed Beds Current *
					Days Open	Occ. Rate	Days Open	Occ. Rate	
Methodist Medical Center of Oak Ridge	Anderson	301	255	48,308	109,865	44.0	93,075	51.9	301
Ridgeview Psychiatric Hospital and Center	**Anderson**	**16**	**16**	**3,372**	**5,840**	**57.7**	**5,840**	**57.7**	**Not Listed**
Blount Memorial Hospital	Blount	304	238	51,691	110,960	46.6	86,870	59.5	304
Peninsula Hospital	**Blount**	**155**	**137**	**29,332**	**56,575**	**51.8**	**50,005**	**58.7**	**0**
Tennova Healthcare - Lafollette Medical Center	Campbell	66	66	11,429	24,090	47.4	24,090	47.4	66
Jellico Community Hospital, Inc.	Campbell	54	31	4,724	19,710	24.0	11,315	41.7	54
Claiborne County Hospital	Claiborne	85	39	7,178	31,025	23.1	14,235	50.4	85
Tennova Healthcare - Newport Medical Center	**Cocke**	**74**	**36**	**7,607**	**27,010**	**28.2**	**13,140**	**57.9**	**16**
Cumberland Medical Center	Cumberland	189	123	22,073	68,985	32.0	44,895	49.2	189
Jamestown Regional Medical Center	Fentress	85	54	5,422	31,025	17.5	19,710	27.5	85
Morristown - Hamblen Healthcare System	Hamblen	167	147	25,436	60,955	41.7	53,655	47.4	167
Lakeway Regional Hospital	Hamblen	135	65	14,064	49,275	28.5	23,725	59.3	135
Wellmont Hancock County Hospital	Hancock	10	10	1,199	3,650	32.8	3,650	32.8	10
Wellmont Hawkins County Memorial Hospital	Hawkins	50	46	3,530	18,250	19.3	16,790	21.0	50
Tennova Healthcare - Jefferson Memorial Hospital	Jefferson	58	58	8,565	21,170	40.5	21,170	40.5	58
Fort Sanders Regional Medical Center	Knox	517	378	86,156	188,705	45.7	137,970	62.4	517
Tennova Healthcare	**Knox**	**111**	**243**	**74,903**	**40,515**	**184.9**	**88,695**	**84.5**	**903**
University of Tennessee Memorial Hospital	Knox	581	534	136,604	212,065	64.4	194,910	70.1	581
East Tennessee Children's Hospital	Knox	152	152	40,530	55,480	73.1	55,480	73.1	152
Parkwest Medical Center	**Knox**	**307**	**297**	**75,068**	**112,055**	**67.0**	**108,405**	**69.2**	**462**
Mercy Medical Center West	Knox	101	101	16,853	36,865	45.7	36,865	45.7	0
North Knoxville Medical Center	Knox	108	72	15,128	39,420	38.4	26,280	57.6	0
Select Specialty Hospital - Knoxville	Knox	35	35	10,153	12,775	79.5	12,775	79.5	35
Select Specialty Hospital - North Knoxville	Knox	33	33	9,127	12,045	75.8	12,045	75.8	33
Fort Loudoun Medical Center	Loudon	50	30	6,195	18,250	33.9	10,950	56.6	50
Woods Memorial Hospital	**McMinn**	**72**	**48**	**7,526**	**26,280**	**28.6**	**17,520**	**43.0**	**0**
Athens Regional Medical Center	**McMinn**	**118**	**63**	**8,366**	**43,070**	**19.4**	**22,995**	**36.4**	**190**
Sweetwater Hospital Association	Monroe	59	59	10,251	21,535	47.6	21,535	47.6	59
Roane Medical Center	**Roane**	**105**	**36**	**6,620**	**38,325**	**17.3**	**13,140**	**50.4**	**54**
Pioneer Community Hospital	**Scott**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**25**
LeConte Medical Center	Sevier	79	69	13,269	28,835	46.0	25,185	52.7	79
Service Area Total/Average		**4,177**		760,679		46.7%		53.6%	**4,660**

Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics
* Current Licensed Beds from Health Care Facilities Licensed Facilities website.

SUPPLEMENTAL-1

September 29, 2014 11:46am

Please also complete the table below showing the trend in utilization from 2010-2012.

Service Area Historical Utilization

Facility	Licensed Beds (2012)	2010 Patient Days	2011 Patient Days	2012 patient Days	'10-'12 % Change
21 County PSA	4,177	829,367	821,813	760,679	-8.3%
UTMC	581	137,257	137,141	140,304	+2.2%
UTMC as a % of All Hospitals	14%	16.5%	16.7%	18.4%	+1.9%

Area-wide, inpatient days decreased by 8.3% from 2010-2014. During this same period of time, UTMC's inpatient days increased by 2.2%. During this same time, UTMC's inpatient days as a percentage of total area-wide inpatient days, grew each year for a total increase of 1.9%. And this growth does not take into account observation days, which have grown significantly at UTMC.

7. **Section C., Need, Item 6.**

The utilization projections are noted. The applicant notes in the bed complement table on page 4 that the build out approved in CN0912-056AE will be completed in November 2014 which will open up another 32 Med/Surg beds. As a result, it appears the service's staffed beds will increase from 390 to 422 beds on or about December 2014. However, the projected utilization appears to be based on 342 beds in CY2014 and only 402 beds in Year 1. Please clarify. If possible, please also add projected utilization for CY2015 to further illustrate the increase in the utilization of the service's bed complement.

The projected utilization is for staffed med-surg beds only, not total hospital staffed beds. So the current staffed med-surg bed total of 342 will increase by 60 beds to 402 in Year 1 (28 requested new beds + 32 beds to be opened in the Heart Hospital in November, 2014).

The column for 2015 projected utilization has been added to the table below.

To help summarize the applicant's historical and projected utilization, please complete the table below.

Service	2011	2012	2013	2014	2015 (Projected)	Year 1	Year 2
Med/Surg Beds	312	327	319	342	374	402	402
Patient Days	89,201	98,740	103,976	116,220	122,270	127,564	128,840
Occupancy	78.3%	82.7%	89.3%	93.1%	89.6%	86.9%	87.8%8

ICU Beds (Adult)	75	75	75	75	75	91	91
Patient Days	22,680	21,687	21,563	22,346	22,793	27,241	27,606
Occupancy	81.8%	79.2%	78.8%	81.6%	83.3%	82%	83.1%
UTMC Total Beds	581	581	581	581	581	625	625
Patient Days	155,583	156,827	162,214	176,342	180,837	190,641	192,548
Occupancy	73.4%	74%	76.5%	83.2%	85.3%	83.6%	84.4%

Based on the tables provided, there was a 4% increase in Med/Surg patient days from 2013 to 2014 (without observation days) and a decrease in the ICU's occupancy. As such, please summarize the rationale used to determine how many additional beds by service where needed to support the projected utilization levels of the project.

Med-surg beds: In evaluating the need for additional med-surg beds at UTMC, it is imperative to consider observations days. In many cases, it is not known whether an observation patient will in fact become an inpatient admission until 24-48 hours after the patient is put in a bed. Furthermore, whether the patient is eventually determined to be inpatient or observation patient, that patient occupies a bed. In that sense, and in determining bed utilization, occupancy, and utilization, there is no difference between and inpatient and observation patient. The only difference is the reimbursement.

Accordingly, the more accurate measurement of growth in utilization is total patient days including observation days. As reflected on the table on page 30 of the application, total med-surg patient days grew 17.7% between 2012-2014, and 11.8% between 2013-2014. Even excluding observation days, patient days grew by 10.1% between 2012-2014.

Furthermore, there is no reason to believe the increase in utilization will drop off in the future. Emergency Room visits have increased from 64,500 in 2009 to over 85,000 in 2013. Over 40% of all patients who are treated in the emergency room require use of an acute care bed during the patient's stay.

Another factor contributing to the need for addition beds relates to UTMC's position as the only academic medical center in the region. UTMC has a total of 210 Residents and Fellows (physicians in advanced training seeing patients every day and fulfilling its commitment as a teaching hospital and training the next generation of physicians). 27 of these Residents/Fellows are supported through funding directly from UTMC.

In order to maintain accreditation for these training programs certain patient volumes and encounters are required. As medical schools are encouraged to increase enrollments to meet the projected physician shortages, additional resident/fellow positions will be required at teaching hospitals/academic medical centers. This will also contribute to the need for additional beds in the future. The need for additional teaching beds, whether

they be medical surgical or critical care, cannot be quantified, but it is another consideration in the rationale that additional beds are needed.

ICU beds: As reflected in the table on page 31 of the application, there was 3.6% increase in ICU patient days between 2013-2014. There was a 3% increase in ICU patient days between 2012-2014. There was a 0.5% decline in ICU patient days between 2012-2013.

While a 3.6% increase over two years may seem modest in the abstract, the fact is the starting point of the occupancy increase -- 79% -- is reaching the upper limits of maximum efficiency and effectiveness for critical care beds. Critical care beds, because they are distributed among smaller nursing units due to higher patient acuity, cannot be run at the 80% target threshold for all hospital bed types.

UTMC's status as a teaching hospital, a Level I Trauma Center, and a Certified Comprehensive Stroke Center will continue to contribute to the need for the additional ICU beds and will assure continued growth in ICU admissions and patient days. As reflected in the second table on page 31 of the application, the additional beds are likewise projected to maintain occupancy in the 80% range in the first years of operation.

Also, please discuss the planning timeframe the applicant is using in implementing the additional 28 bed Med/Surg and 16 bed ICU capacity.

UTMC anticipates the construction completion and opening of the 28 bed Med/Surg unit in the First Quarter of 2016. The 16 Bed ICU capacity is forecasted to be completed and opened the Third Quarter of 2017.

8. **Section C, Economic Feasibility, Item 1**

The documentation from a licensed architect or construction professional is noted, including the floor plans of the project provided under separate cover. However, please include a general description of the project as an addendum or attachment to the project to reflect the work to be performed discussed in detail in Section B of the application.

Another letter from the project architect is attached following this response.

SUPPLEMENTAL- 1

September 29, 2014
11:46am

bma BARBERMcMURRY
architects since 1915

September 24, 2014

Mr. Scott Castleberry
Director Facilities Planning and Construction Services
University Health System, Inc.
1924 Alcoa Highway
Knoxville, TN 37920

RE: UHS NICU Phase II
Knoxville, Tennessee
BMa Project No. 132000

Dear Mr. Castleberry:

By letter dated September 10 we verified the estimated construction-related costs of this project are reasonable, and listed the applicable building codes. In response to the question from the Project Examiner with the Health Services and Development Agency, this will confirm our understanding of the general scope of the project as follows:

1. Expansion of the Neonatal Intensive Care Unit (NICU). The NICU is located on the 3rd floor of the North Pavilion. It has 67 beds/basinets. The NICU currently consists of 26,851 square feet of space. Of this total, 15,432 square feet, an "open floor" unit (no dividing walls between bassinets) with 33 beds, will be renovated to provide support areas for the new private patient rooms. The NICU will also be expanded through a new construction addition to adjoin the current unit on the north side. This will be accomplished by building new space on what is now the roof of the 2nd floor. The new construction will consist of 9,758 square feet of separately walled, single occupancy rooms. The additional space is required in order for the entire NICU to comply with new code requirements, and to provide infants and families with adequate and comfortable space.

2. A new Intensive Care Unit (ICU) will be located on the 4th floor of the North Pavilion. This new construction addition will adjoin the current building, and will be located above the new space constructed for the NICU on the 3rd floor. It will consist of 16,850 square feet of new space. In addition, minor renovation will be required to the elevator lobby (mainly for purpose of adjoining the existing building to the newly constructed addition) which will consist of 1,262 square feet. This addition will house the 16 requested additional beds for the ICU.

3. Renovation of the 6th floor of the South Tower. This space consists of 12,000 square feet and is currently not used for inpatient care; it houses outpatient physician clinical offices. This space will be renovated and converted to general acute care bed space. The offices currently occupying the space will be relocated to a medical office building on the UTMC campus. This space will house 28 of the additional beds requested. All rooms will be single occupancy.

SUPPLEMENTAL- 1

Please let us know if you require additional information.

Sincerely,

BarberMcMurry architects LLC

Charles V. Griffin, AIA
President

Cc: Laura Johnston, File

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Please also provide a comparison to the construction costs documented by HSDA for the 2011 to 2013 period for similar hospital projects.

The HSDA approved costs for hospital renovation and construction reflected on pages 34 and 35 of the application are actually for the period 2011-2013. The reference to 2011-2012 was a typographical error.

Replacement pages for pages 34 and 35 are attached following this response.

9. Section C., Economic Feasibility, Item 4

Historical Data Chart **- the chart is noted. Comparison of the net revenue amount for 2013 in the chart to the applicant's 2013 JAR revealed a difference of approximately $4 million. Comparison to the net revenue in the Consolidated Statement in the attachments revealed a difference of approximately 2 million for the period. Please clarify the reasons for the differences between these sources.**

Generally speaking, the differences are due to how certain revenues are categorized on the different reports. An explanation is reflected below.

Historical Data Chart vs. JAR:

Per Historical Chart – "Net Operating Revenue" =	$628,587,587
Per JAR – "Total Revenue" =	$632,479,878

The difference is $3,892,291. This amount is the non-operating revenue.

In the JAR the non-operating revenue is included in "Total Revenue."

On the Historical Data Chart the non-operating revenue is included in "Total Other Revenue – Net."

Historical Data Chart vs. Consolidated Statement:

Comparison to net revenue in the Consolidated Statement in the attachments revealed a difference of approximately $2 million for the period.

Consolidated Total Revenue	631,443,788
Less: UHSV Total Revenue	(1,456,348)
Less: RTS Total Revenue	(1,399,853)
Equals: Medical Center Total Revenue	628,587,587
Per Historical Chart - Net Operating Revenue	628,587,587
Difference:	-

Please refer to page 32 of the Consolidated Financial Statements and Schedules. Page 32 is the consolidating schedule and shows the Medical Center Total Revenue in column 1 and the consolidated Total Revenue for all companies in Column 5. Column 5 ties to the Consolidated Statement of Operations on page 4 of the audited financials.

Although gross revenue increase over the period by an average of approximately 12.3% per year, net revenue winds up decreasing based on a $3.6 million increase in contractual adjustments from 2011 to 2013. Briefly describe the developments that account for the decline in net revenues as reflected in the chart.

Net Operating Revenue increased from 2011 to 2013.

Net Operating Income decreased from 2011 to 2013.

The decline in NOI is due to several factors. One is the increase in contractual adjustments, as noted. Another is a decrease in Other Revenue, the categories of which are itemized on the HDC. Another is an increase in Total Operating Expenses, as reflected on the HDC.

Total Operating expenses in the Historical Data Chart for 2013 appear to be approximately $15 million lower than what is reflected in the financial statements for the period. As a result, net operating income after capital expenditures appears to be overstated. Please explain.

Historical Data Chart - Total Operating Expenses	611,474,700
Historical Data Chart - Capital Expenditure - Interest	12,270,742
Total Expense	623,745,442
Consolidated Financials - Page 32,Column 1 Medical Center Total Operating Expenses	623,745,442

Please refer to page 32 of the Consolidated Financial Statements and Schedules. Page 32 is the consolidating schedule and shows the Medical Center Total Operating Expense in column 1 and the consolidated Total Operating Expenses for all companies in Column 5. Column 5 ties to the Consolidated Statement of Operations on page 4 of the audited financials.

Projected Data Chart –

The charts for both the Med/Surg and ICU services show salaries and wages based on the staffing discussed on page 44 of the application - approximately 41 Med/Surg full time equivalents and 49 ICU full time equivalents. Please describe the methodology used to determine the salary and wage amounts identified in the chart for the first year of the project.

The salary and wage amounts on the projected data charts were extrapolated from current actual direct (patient care) and indirect (support services) expenses per patient day for similar nursing units. An existing med/surg unit, with patients of comparable acuities, was used for the new med/surg projection, and an existing critical care unit was used to model the expenses for the new critical care unit.

In light of the NOI loss of -$2,263,663 for 2013 shown in the Historical Data Chart (after capital expenditures), please discuss the project's impact to the financial performance of the hospital as a whole for the first full year following completion of the project.

UHS is experiencing an increasing number of days where we cannot accept all the patients who choose to come to the Medical Center. This project helps us to address these capacity constraints.

From an accounting/financial performance perspective, UHS should experience improved results. These additional patients should be treated at a lower cost basis. While the direct costs of staffing the units with caregivers will be similar, the indirect cost will be lower on this incremental volume. For example, additional revenue cycle staff will not need to be hired for this additional volume. Lower indirect costs will improve the financial performance of the Medical Center.

10. Section C, Economic Feasibility. Item 9

Based on review of gross revenues in the applicant's 2013 JAR, the Medicare and TennCare/Medicaid payor mix equates to approximately 55% and 8.5%, respectively in lieu of the amounts identified by the applicant in the response. Please clarify the payor mix. If in error, please provide a replacement page with your response. ***Note: amounts identified in JAR for hospital: Medicare-$1,182,975,000; Medicaid/TennCare/Cover TN - $179,972,000 and $2,145,240,680***

The projected payor mix numbers in the application are believed to be accurate, and match very closely the historical experience as reflected in the 2013 JAR. The sources of the perceived discrepancy are the following:

1. The amount of Medicare gross revenue stated in the question ($549,973,563) double-counts the Medicare Managed Care revenues set forth in the JAR. The amount in Line 1.a.1 is incorporated into the amounts in Line 1.a. So, $198,141,346 was duplicated in the reviewer's number, thus increasing the Medicare mix.

2. The amount of Medicaid/TennCare/Cover TN stated in the question ($179,972,000) is not the correct amount, and the source of that number is not known to the applicant. The correct amount is $344,919,545. This caused the perceived TennCare mix to be lower than it actually was.

When the correct numbers are used, the 2013 Medicare mix was 46%, which is the projected Medicare mix stated in the application.

When the correct numbers are used, the 2013 TennCare mix was 16%. The applicant discounted the projected TennCare mix for this project down to 13%, due to the fact some relatively high TennCare admissions such as O.B. are not included in this project.

A table showing the calculations used is attached following this response.

SUPPLEMENTAL- 1

September 29, 2014
11:46am

		Total per Supp Questions		Correct Amounts
Medicare Charges per JAR				
1.a)	Medicare I/P - Total (includes managed care	549,973,563		549,973,563
1.a)	1) Medicare Managed Care - I/S	198,141,346	duplicated	
1.b)	Medicare O/P Total	434,859,915		434,859,915
	Total Medicare	1,182,974,824		984,833,478
	Total Charges	2,145,240,679		2,145,240,679
	Per 2013 JAR- Payor Percent	55.1%		45.9%
	Per CON Application Medicare Mix			46%

Medicaid/TennCare Charges per JAR		Total per Supp Questions	Correct Amounts
1. c)	Medicaid/TennCare Inpatient		218,309,727
1. d)	Medicaid/TennCare Outpatient		124,357,091
2. a)	Cover TN		2,252,636
	Total Medicaid/TnCare Charges (undetermined source)	179,972,000	344,919,454
	Total Charges	2,145,240,679	2,145,240,679
	Per 2013 JAR - Payor Percent	8.4%	16.1%
	Per CON Application TennCare mix		13%

The projected TennCare mix for this project was lowered from the historical hospital wide TennCare mix due to the fact that certain relatively high TennCare admissions such as OB are not included in this project.

11. Section C, Orderly Development, Item 4

Please complete the table below highlighting the growth in the physician medical staff that may result, in large part, from implementation of this project.

Medical Specialty	#2013 JAR	Current	Year 1
Surgery	138	145	
OB/GYN	41	40	
Internal Medicine	35	39	43.2
Other	302	302	
Total	516	526	

Medical staff physician growth is expected to be at a rate consistent with historical trends. We estimate an additional 4.2 additional internal medicine physician FTEs will be needed to maintain our current standard of high quality patient care for the new beds associated with the project.

12. Section C, Orderly Development, Item 3

The staffing pattern is noted. The applicant states that it matches that of existing bed units of equivalent bed count. As such, it appears that total estimated staffing of the Med/Surg service and the ICU services may total to approximately 571 FTEs and 294 FTEs, respectively, using the applicant's methodology. In terms of cost, both services appear to account for approximately 65% UTMC's total salary and wage cost reflected in the Historical Data Chart for 2013. Is the methodology used by the applicant consistent with these estimates? Please confirm.

The cost estimates used by the applicant for salary and wage amounts were extrapolated from current actual direct (patient care) and indirect (support services) expenses per patient day for similar nursing units. An existing med-surg unit, with patients of comparable acuities, was used for the new med-surg projection, and an existing critical care unit was used to model the costs for the new critical care unit.

The salaries and wages of only the nursing positions associated with this project, extrapolated to the entire hospital would not equate to 65% of total hospital salaries and wages. The salaries and wages on the Projected Data Chart include not only the clinical positions described in response to Question C, III, Orderly Development 3 of the application. The salaries and wages on the PDC also include allocations for salaries and wages for all ancillary clinical services (pharmacy, imaging, physical therapy, etc.), as well as non-clinical services (dietary, maintenance, administrative, etc.).

13. Section C., Orderly Development, Item 7.

The Joint Commission accreditation award effective September 2011 is noted. However, review of the award letter attached to the application and the TDH licensed facilities link on the HSDA toolkit, revealed that the accreditation will expire on September 24, 2014 before the application can be heard. Please explain the status of UTMC's accreditation at present.

UTMC was surveyed on September12, 2014. The Joint Commission made no conditional level findings. UTMC is developing its corrective action plan, which will be submitted to the Joint Commission shortly. UTMC is confident it will attain renewal of its accreditation, which will be retroactive to September 24, 2014. When UTMC receives additional information form the Joint Commission, this will be submitted to the HSDA.

Review of the TDH licensed facility report also revealed the last survey by TDH was on August 20, 2008. If a more recent survey exists, please provide a copy of the survey (with plan of correction) and a copy of the acceptance letter by the Department of Health, as applicable.

The 2008 survey is the most recent by the Department of Health.

SUPPLEMENTAL- 1

September 29, 2014
11:46am

SEP 29 '14 AM 11:38

AFFIDAVIT

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

I, Teresa Levey, after first being duly sworn, state under oath that I am the applicant named in this Certificate of Need application or the lawful agent thereof, that I have reviewed all of the supplemental information submitted herewith, and that it is true, accurate, and complete.

Teresa K Levey
Name

Sworn to and subscribed before me this the 26 day of September 2014, a Notary Public in and for Knox County, Tennessee.

Wendy S. O'Neal
Notary Public

My Commission Expires: 3-31-18

WENDY S. O'NEAL
STATE OF TENNESSEE NOTARY PUBLIC
COUNTY OF KNOX

COPY

ADDITIONAL INFORMATION

Supplemental -1

University of Tennessee Medical Center

CN1409-042

STITES & HARBISON PLLC
ATTORNEYS

September 30, 2014

Jerry W. Taylor
(615) 782-2228
(615) 742-0703 FAX
jerry.taylor@stites.com

Mr. Jeff Grimm
Health Services and Development Agency Examiner
Tennessee Health Services and Development Agency
Andrew Jackson Building, Ninth Floor
502 Deaderick Street
Nashville, TN 37243

RE: University of Tennessee Medical Center
CN1409-042

Dear Jeff:

Please accept this additional information and clarification to the supplemental responses which were filed for this project on September 29, 2014.

The table on page 40 has been revised to reflect the correct current and proposed Year 1 total charges for the med-surg beds. This update was overlooked following a revision to the Projected Data Chart prior to filing the application. A Replacement Page 40 is submitted herewith.

The response to Question 6, B of the application has been revised to reflect a comparison of the applicant's proposed charges to some proposed charges recently approved for Skyline Medical Center, CN1406-020. This application had not been approved at the time the application was filed. A Replacement page 41 and an attachment are submitted herewith.

The response to Supplemental Question 20 has been expanded to confirm UTMC will provide a copy of any future correspondence regarding Joint Commission re-accreditation of UTMC. A Replacement Page 20 of the Supplemental Reponses is submitted herewith.

Please let me know if you have any additional questions or if additional information is required. We appreciate your assistance.

Sincerely yours,

STITES & HARBISON PLLC

Jerry W. Taylor

Additional Information -Copy-

University of Tennessee Medical Center

CN1409-042

STITES & HARBISON PLLC
ATTORNEYS

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401 Commerce Street
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Nashville, TN 37219
[615] 782-2200
[615] 782-2371 Fax
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(615) 742-0703 FAX
jerry.taylor@stites.com

November 24, 2014

Mr. Jeff Grimm
Health Services Development Agency Examiner
Tennessee Health Services and Development Agency
Andrew Jackson Building, Ninth Floor
502 Deaderick Street
Nashville, TN 37243

RE: University of Tennessee Medical Center
CN1409-042
Updated Accreditation Information

Dear Jeff:

In supplemental question 13 of your letter dated September 22, 2014 you asked for the current Joint Commission accreditation status for the applicant, UTMC. At that time, a Joint Commission survey had recently been conducted and UTMC was in the process of completing and submitting its Plan of Correction.

UTMC has now received notification that it has been granted full Joint Commission re-accreditation effective September 13, 2014. Full accreditation was received under both the Comprehensive Accreditation Manual for Hospitals and the Medicare Conditions for Hospitals. Copies of the notification letters from the Joint Commission are attached.

Please make the letters part of the application packet so the Agency members will have this information for the hearing in December. Please let me know if you have any questions.

Sincerely yours,

STITES & HARBISON PLLC

Jerry W. Taylor

The Joint Commission

November 24, 2014

Joe Landsman, CPA
CEO
The University of Tennessee Medical Center
1924 Alcoa Highway
Knoxville, TN 37920

Joint Commission ID #: 7853
Program: Hospital Accreditation
Accreditation Activity: 60-day Evidence of Standards Compliance
Accreditation Activity Completed: 11/21/2014

Dear Mr. Landsman:

The Joint Commission would like to thank your organization for participating in the accreditation process. This process is designed to help your organization continuously provide safe, high-quality care, treatment, and services by identifying opportunities for improvement in your processes and helping you follow through on and implement these improvements. We encourage you to use the accreditation process as a continuous standards compliance and operational improvement tool.

The Joint Commission is granting your organization an accreditation decision of Accredited for all services surveyed under the applicable manual(s) noted below:

- Comprehensive Accreditation Manual for Hospitals

This accreditation cycle is effective beginning September 13, 2014. The Joint Commission reserves the right to shorten or lengthen the duration of the cycle; however, the certificate and cycle are customarily valid for up to 36 months.

Please visit Quality Check® on The Joint Commission web site for updated information related to your accreditation decision.

We encourage you to share this accreditation decision with your organization's appropriate staff, leadership, and governing body. You may also want to inform the Centers for Medicare and Medicaid Services (CMS), state or regional regulatory services, and the public you serve of your organization's accreditation decision.

Please be assured that The Joint Commission will keep the report confidential, except as required by law. To ensure that The Joint Commission's information about your organization is always accurate and current, our policy requires that you inform us of any changes in the name or ownership of your organization or the health care services you provide.

Sincerely,

Mark Pelletier

Mark G.Pelletier, RN, MS

Chief Operating Officer

Division of Accreditation and Certification Operations

The Joint Commission

November 24, 2014

Re: # 7853
CCN: #440015
Program: Hospital
Accreditation Expiration Date: September 13, 2017

Joe Landsman
CEO
The University of Tennessee Medical Center
1924 Alcoa Highway, Box 52
Knoxville, Tennessee 37920

Dear Mr. Landsman:

This letter confirms that your September 09, 2014 - September 12, 2014 unannounced full resurvey was conducted for the purposes of assessing compliance with the Medicare conditions for hospitals through The Joint Commission's deemed status survey process.

Based upon the submission of your evidence of standards compliance on October 31, 2014 and November 14, 2014, The Joint Commission is granting your organization an accreditation decision of Accredited with an effective date of September 13, 2014.

The Joint Commission is also recommending your organization for continued Medicare certification effective September 13, 2014. Please note that the Centers for Medicare and Medicaid Services (CMS) Regional Office (RO) makes the final determination regarding your Medicare participation and the effective date of participation in accordance with the regulations at 42 CFR 489.13. Your organization is encouraged to share a copy of this Medicare recommendation letter with your State Survey Agency.

This recommendation applies to the following location:

Cole Neuroscience Center-Northshore Movement Disorder Clinic
9625 Kroger Park Drive, Suite 300, Knoxville, TN, 37922

The University of Tennessee Medical Center
1924 Alcoa Highway, Knoxville, TN, 37920

The UTMC Outpatient Infusion Therapy
11440 Parkside Drive Suite 202, Knoxville, TN, 37934

University Cancer Specialists
1907 West Morris Blvd, Suite F, Morristown, TN, 37813

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

The Joint Commission

University Cancer Specialists
1108 Fox Meadows Blvd. Suite 1, Sevierville, TN, 37862

University Cancer Specialists
270 Joule Street, Alcoa, TN, 37701

University Cancer Specialists
2480 Highway 72 North, Loudon, TN, 37774

UT Medical Center/Rehab @ Halls
4005 Fountain Valley Dr. Suite 400, Knoxville, TN, 37918

UT Medical Center/Rehab @ Hardin Valley
2587 Willow Point Way, Knoxville, TN, 37932

UT Medical Center/Rehab @ Northshore
9625 Kroger Park Dr. Suite 100, Knoxville, TN, 37922

UT Medical Center/Rehab @ Seymour
11546 Chapman Highway, Seymour, TN, 37865

UT Outpatient Diagnostic Center at Turkey Creek
11440 Parkside Drive, Ste 204 Plaza 2, Knoxville, TN, 37934

UT Sleep Center
420 W. Morris Blvd, Suite 400-H, Morristown, TN, 37813

We direct your attention to some important Joint Commission policies. First, your Medicare report is publicly accessible as required by the Joint Commission's agreement with the Centers for Medicare and Medicaid Services. Second, Joint Commission policy requires that you inform us of any changes in the name or ownership of your organization, or health care services you provide.

Sincerely,

Mark Pelletier

Mark G. Pelletier, RN, MS
Chief Operating Officer
Division of Accreditation and Certification Operations

cc: CMS/Central Office/Survey & Certification Group/Division of Acute Care Services
CMS/Regional Office 4 /Survey and Certification Staff

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

AFFIDAVIT

STATE OF TENNESSEE)
)
COUNTY OF DAVIDSON)

Re: The University of Tennessee Medical Center, CN1409-042

I, Jerry W. Taylor, after first being duly sworn, state under oath that I am the applicant named in this Certificate of Need application or the lawful agent thereof, that I have reviewed all of the supplemental information submitted herewith, and that it is true, accurate, and complete.

Name

Sworn to and subscribed before me this the 25th day of November, 2014, a Notary Public in and for Davidson County, Tennessee.

NANCY JOHNSON STATE OF TENNESSEE NOTARY PUBLIC DAVIDSON COUNTY, TENN.

Notary Public

My Commission Expires: My Commission Expires MAR. 7, 2017

CERTIFICATE OF NEED

REVIEWED BY THE DEPARTMENT OF HEALTH
DIVISION OF POLICY, PLANNING AND ASSESSMENT
615-741-1954

DATE: November 28,2014

APPLICANT: University of Tennessee Medical Center
1924 Alcoa Highway
Knoxville, Tennessee

CON#: CN1409-042

CONTACT PERSON: Jerry Taylor, Esquire
401 Commerce Street, Suite 800
Nashville, Tennessee 37219

COST: $26,292,001

In accordance with Section 68-11-1608(a) of the Tennessee Health Services and Planning Act of 2002, the Tennessee Department of Health, Division of Policy, Planning, and Assessment, reviewed this certificate of need application for financial impact, TennCare participation, compliance with *Tennessee's State Health Plan*, and verified certain data. Additional clarification or comment relative to the application is provided, as applicable, under the heading "Note to Agency Members."

SUMMARY:
The applicant, The University of Tennessee Medical Center (UTMC), owned and managed by the University Health System, Inc., a Tennessee not-for-profit corporation has filed this Certificate of Need (CON) application with the Health Services and Development Agency (HSDA) for the following:

1. The expansion and renovation of its Neonatal Intensive Care Unit (NICU) consisting of an estimated 9,758 square feet of new construction and 15,432 square feet of renovated space;

2. The addition of approximately 16,850 square feet of new space and renovation of an estimated 1,262 square of existing space which will house a new addition to the hospital's Intensive Care Unit (ICU);

3. The renovation of an estimated 12,000 square of existing space to convert it from non-inpatient care space to inpatient rooms; and

4. The addition of 44 Acute Care Beds to its license. The bed configuration of these new beds will consist of 28 beds to be utilized as general medical surgical beds and the remaining 16 beds will be utilized as part of the Intensive Care Unit.

The site of this project is 1924 Alcoa Highway, in Knoxville (Knox County), Tennessee. The hospital is a 581 bed acute care hospital. If this project is approved by the HSDA the licensed bed capacity will increase to 625 acute care beds. The project will not add any other services or major medical equipment.

The project is estimated to cost no more than $26,292,001 and will be funded by University Health System, Inc.

GENERAL CRITERIA FOR CERTIFICATE OF NEED

The applicant responded to all of the general criteria for Certificate of Need as set forth in the document *Tennessee's State Health Plan.*

NEED:
The service area for this project consists of the following twenty (21) Tennessee counties: Anderson, Blount, Campbell, Claiborne, Cocke, Cumberland, Fentress, Grainger, Hamblen, Hancock, Hawkins, Jefferson, Knox, Loudon, McMinn, Monroe, Morgan, Roane, Scott, Sevier and Union.

Service Area Total Population Projections for 2014 and 2018

County	2014 Population	2018 Population	% Increase or (Decrease)
Anderson	76,579	77,851	1.7%
Blount	128,368	135,171	5.3%
Campbell	41,474	42,566	2.6%
Claiborne	32,604	33,280	2.1%
Cocke	36,762	38,615	5.0%
Cumberland	57,815	60,292	4.3%
Fentress	18,404	18,987	3.2%
Grainger	23,111	23,675	2.4%
Hamblen	64,108	65,570	2.3%
Hancock	6,652	6,640	-0.2%
Hawkins	57,509	58,164	1.1%
Jefferson	53,729	56,872	5.8%
Knox	453,629	475,569	4.8%
Loudon	50,926	53,192	4.4%
McMinn	53,233	54,203	1.8%
Monroe	46,092	48,088	4.3%
Morgan	21,848	22,004	0.7%
Roane	54,006	54,457	0.8%
Scott	21,944	21,969	0.1%
Sevier	94,833	100,362	5.8%
Union	19,301	19,605	1.6%
Total	**1,412,927**	**1,467,132**	**3.8%**

Source: *Tennessee Population Projections 2000-2020, February 2013 Revision*, Tennessee Department of Health, Division of Policy, Planning and Assessment- Office of Health Statistics.

The project is divided into three (3) parts all involving construction and/or renovation of the hospital's space:

1. Expansion of the Neonatal Intensive Care Unit (NICU). This unit consists of 26,851 square feet of space. The project will utilize 15,432 square feet of this open landscape space to construct 33 single occupancy rooms. The plan will add 9,758 square feet of space on the roof of the second floor to enable the entire NICU to meet new codes requirements and to provide adequate and comfortable space for the infants and families.

2. A new Intensive Care Unit (ICU) will be located on the fourth (4) floor of the North Pavilion. It adjoins the current building and will placed on top of the new third floor space the applicant proposes to construct on top of the NICU forming a new fourth floor. The plan involves the construction of a 16,580 square foot ICU and the addition of minor renovation to the elevator lobby which involves 1,262 square feet of space.

3. The final component of this project involves the renovation of the 6th floor of the south tower. According to the applicant, this space consists of 12,000 square feet which is not currently used for inpatient care. This space, which consists of physician office practices, as noted on page 11 of the CON application, will be renovated and converted to house 28 general acute care beds. These 28 acute care beds will be configured as single occupancy rooms.

The discussion regarding the Contribution to the Orderly Development of Health Care contains the advantages that this project will provide to service area residents and to physicians who wish to send their patients to The University of Tennessee Medical Center. The Medical Center has been for many years the referral of choice for more complex cases requiring intensive care and/or acute care services and NICU services. The applicant documents on page 7 of the CON application that the occupancy rate in 2013 averaged 89.1% occupancy. The number of declinations in YTD as of July 2014 numbered 384. The applicant based upon this data, (not yet available to the Office of Health Statistics) estimates the number of declinations will increase to 650 in 2014.

The applicant also identifies severe shortages in the availability of acute care beds for patients initially treated in the current emergency room and requiring admission to the facility. They report bed holds in the Emergency Department average 235 hours.

Note to Agency Members: The Office of Health Statistics notes that the applicant uses staffed rather than licensed beds to determine its occupancy. The use of staffed beds artificially inflates the occupancy rate as noted by the HSDA and the Department of Health. As an example, the staffed bed occupancy as reported in the Joint Annual Report of Hospitals 2012 was 70.1%. The licensed bed occupancy rate for the same period was 64.4% based on the 2012 final JARs as of 3/19/2014.The applicant apparently limited the occupancy rate to the number of staffed beds involved in this project which would drive up the occupancy rate, as other acute care beds may have been available for acute care patient utilization.

TENNCARE/MEDICARE ACCESS:
The applicant is currently a Medicare provider and a TennCare/Medicaid provider. The facility contracts with all area TennCare Managed Care Organizations (MCOs) and on 1/15/2015 will be, as they note, under contract with AmeriGroup Community Care.

During the most recent fiscal year ending 7/31/2014 the Medicare payor mix was 46% and the TennCare/Medicaid payor mix was 13%. The Medicare net revenue, during this same period, was $7,679,851 for the Med/Surg beds and $4,829,130 for the Intensive Care Unit. The TennCare/Medicaid net revenue for the Med/Surg beds was $2,170,393 and for the Intensive Care Unit was $1,364,754.

ECONOMIC FACTORS/FINANCIAL FEASIBILITY:
The Department of Health, Division of Policy, Planning, and Assessment has reviewed the Project Costs Chart, the Historical Data Chart, and the Projected Data Chart to determine if they are mathematically accurate and the projections are based on the applicant's anticipated level of utilization. The location of these charts may be found in the following specific locations in the Certificate of Need Application or the Supplemental material:

Project Costs Chart: The Project Costs Chart can be found on page 33 of the application. The total estimated project cost is $26,292,001 and as the applicant notes in the Letter of Intent the projected cost is not expected to be above $27,000,000.

Historical Data Chart: The Historical Data Chart is located on page 36 of the CON application. The applicant reports a net operating loss of $(2,263,663) in FY 2013, income of $8,502,449 in FY 2012 and $3,865,824 in FY 2011.

The HSDA staff reviewer conducted a detailed examination of the Historical Data Chart and compared it to the Consolidated Financial Statements and Schedules found as Attachment C, II, Economic Feasibility in the CON application. Several apparent discrepancies were found and the applicant responded and clarified the apparent discrepant financial information. The queries by HSDA staff and the applicant's responses in response to Section C., Economic Feasibility, and Item 4 can be found on pages 16-18 of Supplemental 1.

Projected Data Chart: The Projected Data Charts are located in the CON application on pages 38-39. The applicant projects the 28 bed acute care beds will provide 9,198 patient days and 9,382 patient days, in years one and two with net operating revenues of $470,514 and $95,920 each year, respectively.

The Projected Data Chart for the 16 bed Critical Care Unit (ICU) estimates this unit will provide 4,672 patient days of care and is expected to generate $236,302 net operating revenue in year 1 of the project. In year 2 of the project, despite a modest increase in the number of patient bed days and gross patient revenue, the project will generate only $29,612 in net operating revenue in year 2.

The applicant noted the reason for the conservative projected revenue from its services in year 2 of the project stem from its anticipated reduction in revenues from Medicare, TennCare/Medicaid and other third parties as the Affordable Care Act impacts hospital providers.

CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTHCARE:
The revised Executive Summary contains a brief discussion regarding the potential impact of this project upon other area hospitals. This response can be found on page 1 of Supplemental 1. The University of Tennessee Medical Center serves a 21 county service area and will have no significant impact upon existing providers. If anything the ability to reduce declinations due to overcrowding will allow more rapid service deliver to patients that require acute and intensive care services. The renovations to the NICU do not expand capacity but does allow placement of its patients in private rooms.

Note to Agency Members: *The HSDA staff review identified concerns regarding the lack of data regarding Jamestown Regional Medical Center in Fentress County, specifically the lack of data (zeros) for inpatient days, average daily census and current need for acute care beds in the county. The Tennessee Department of Health, Division of Policy, Planning and Assessment-Office of Health Statistics reviewed the Acute-Care Bed Need Projections For 2014 and 2018, Based on the 2012 Hospital JARS and noted the publication date was 11/14/2013 and confirmed that the data was as reported by Jamestown Regional Medical Center at that time. A more recent final calculation by the Office of Health Statistics using the final submissions from this facility contained the required information. Jamestown Regional Medical Center was licensed as an 85 bed acute care hospital. The final data reveals the hospital had 54 staffed beds during the 2012 reporting period with 5,422 inpatient days of care resulting in a licensed occupancy rate of 17.5% and a staffed bed occupancy rate of 27.5%. This information can be found in the individual Joint Annual Report 2012 of Hospitals.*

The applicant provided a listing of all existing contractual relationships as Attachment C, III, Orderly Development 1 in the CON Application.

The planned development of this project will positively impact the service area in several ways:

1. Patients requiring acute care and intensive care will be able to utilize these services on a more consistent basis;
2. Patients in the Emergency Department will have a better chance of securing an inpatient bed and continue their treatment within The University of Tennessee Medical Center;

3. Neonatal Intensive Care Unit patients and family, when the renovation of this unit is completed, will be able to have greater privacy and comfort with the new private NICU beds;
4. The orderly development of health care will be enhanced because the increase in beds will allow patients, family and physicians to make decisions regarding their treatment based on the increased availability of acute care beds and the enhanced emergency services.

The Tennessee Department of Health, Division of Policy, Planning and Assessment-Office of Health Statistics verified that the last survey conducted by Division of Health, Licensure and Regulation was on 8/20/2008. The facility is licensed with an expiration date of 3/4/2015. The facility has been accredited by The Joint Commission and at the time of its application had an expiration date of 9/24/2014. The Joint Commission survey can be found as Attachment C, III, in the CON application. The last Joint Commission survey took place on 11/03/2011. There were no Requirements for Improvement identified by the Joint Commission.

SPECIFIC CRITERIA FOR CERTIFICATE OF NEED

The applicant responded to all relevant specific criteria for Certificate of Need as set forth in the document *Tennessee's State Health Plan.*

ACUTE CARE BED NEED SERVICES

1. The following methodology should be used and the need for hospital beds should be projected four years into the future from the current year:

   Using the latest utilization and patient origin data from the Joint Annual Report of Hospitals and the most current population projection series from the Department of Health, perform the following:

   Step 1

   Determine the current Average Daily Census (ADC) in each county.

   $$ADC = \frac{\text{Patient Days}}{\text{365 (366 in leap year)}}$$

   Step 2

   To determine the service area population (SAP) in both the current and projected year:

   a. Begin with a list of all the hospital discharges in the state, separated by county, and showing the discharges both by the county where the patient actually lives (resident discharges), and the county in which the patient received medical treatment.

   b. For the county in which the hospital is (or would be) located (service county), determine which other counties have patients who are treated in your county (resident counties). Treat all of the discharges from another state as if that whole state were a single resident county. The total discharges of residents from another state should be calculated from state population estimates and the latest National Center for Health Statistics southeastern discharge rates.

c. For each resident county, determine what percent of their total resident discharges are discharged from a hospital in your service county (if less than one percent, disregard).

d. For each resident county, apply the percentage determined above to the county's population (both projected and current). Add together the resulting numbers for all the resident counties and add that sum to the projected and current population of your service county. This will give you the service area population (SAP).

Step 3

Determine projected Average Daily Census as:

$$\text{Projected ADC} = \text{Current ADC X } \frac{\text{Projected SAP}}{\text{Current SAP}}$$

Step 4

Calculate Projected Bed Need for each county as:

Projected Need = Projected ADC + 2.33 x ▪Projected ADC

However, if projected occupancy:

$$\text{Projected Occupancy: } \frac{\text{Projected ADC}}{\text{Projected Need}} \text{ x } 100$$

is greater than 80 percent, then calculate projected need:

$$\text{Projected Need} = \frac{\text{Projected ADC}}{.8}$$

The acute bed need, as calculated by the Tennessee Department of Health, Division of Policy, Planning and Assessment-Office of Health Statistics, is based upon the 2012 Final Hospital Joint Annual Report data and the 2013 series population projections also prepared by the Office of Health Statistics. The acute care bed surplus in the twenty-one (21) county service area was 1,250 beds. There was no need for additional beds in the service area based upon the acute care bed need formula.

2. New hospital beds can be approved in excess of the "need standard for a county" if the following criteria are met:

a) All existing hospitals in the projected service area have an occupancy level greater than or equal to 80 percent for the most recent Joint Annual Report. Occupancy should be based on the number of licensed beds that are staffed for two consecutive years.

The Tennessee Department of Health, Division of Policy, Planning and Assessment-Office of Health Statistics determined that all of the hospitals in the service did not have an

occupancy rate greater than or equal to 80% during the 2011 and 2012 Joint Annual Report periods.

b) All outstanding CON projects for new acute care beds in the proposed service area are licensed.

The Health Services and Development Agency maintains a record of all CON acute care projects involving hospital facilities within the service area.

c) The Health Facilities Commission may give special consideration to acute care bed proposals for specialty health service units in tertiary care regional referral hospitals.

The project appears to meet this criterion because the facility is a tertiary regional referral hospital and this application appears to address the need for additional intensive care beds and acute care beds as well as providing greater privacy and comfort for patients and newborns in the renovated neonatal intensive care unit.

CONSTRUCTION, RENOVATION, EXPANSION, AND REPLACEMENT OF HEALTH CARE INSTITUTIONS

1. Any project that includes the addition of beds, services, or medical equipment will be reviewed under the standards for those specific activities.

The applicant has submitted a complete CON application that includes the responses to all of the standards for acute care beds as contained in the specific criteria.

2. For relocation or replacement of an existing licensed health care institution:

a. The applicant should provide plans which include costs for both renovation and relocation, demonstrating the strengths and weaknesses of each alternative.

b. The applicant should demonstrate that there is an acceptable existing or projected future demand for the proposed project.

The applicant does not propose to relocate or replace an existing facility.

3. For renovation or expansions of an existing licensed health care institution:

a. The applicant should demonstrate that there is an acceptable existing demand for the proposed project.

The need for this project can be found in the Need section of this report and additional information regarding the project's Contribution to the Orderly Development of Health Care can be found in that section of this report.

b. The applicant should demonstrate that the existing physical plant's condition warrants major renovation or expansion.

The applicant provided detailed assessments of the current facility and presented the need for expansion of acute care and intensive care units. The renovation of the NICU unit and the conversion of the existing single ward to individual private rooms for the enhancement of privacy for patients and infants and the enhanced comfort these arrangements was discussed in detail within the application.